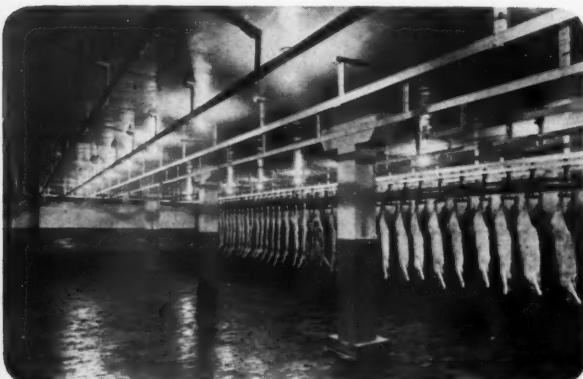


# THE NATIONAL Provisioner

VOLUME 22 NUMBER 8  
Meat Packing and Allied Industries  
AUGUST 1931

## DON'T CLOSE DOWN TO PAINT



### Drying Out or Heating to Eliminate Condensation Is Not Necessary

When you paint with Damp-Tex there is no loss of time or production. Damp-Tex sticks to wet surfaces like ordinary paint sticks to dry. Damp-Tex penetrates... forces out moisture... dries into a tough, enamel-like waterproof film.

One coat of Damp-Tex is usually sufficient. It dries in about one hour. Can be handled in four. Resists corrosive gases and oxidation. Stays tough and elastic without cracks, blisters or checks after years of exposure by actual tests. It can be washed repeatedly with soap and water. Contains no turpentine, or odor that will taint foods. Place your order now on money-back guarantee.

Rooms and Equipment Can Be Protected, Lightened and Made More Efficient with a Coat of DAMP-TEX Applied Directly Over Wet Surfaces



**MONEY-BACK GUARANTEE** If after following simple directions the buyer finds any shipment of Damp-Tex does not do all we claim for it, notify us and we will give you shipping instructions for the balance and cancel the charge for the amount used or, if already paid for, will refund your money. On your first order we will ship one gallon of Damp-Tex at regular price of \$3.95, or five gallons or more at \$3.85 per gallon and pay all freight charges. Points west of Rockies, add 25c per gallon.

#### RECOMMENDED FOR:

Brine Tank Rooms • Coolers • Sausage and Casing Rooms • Smoke Houses • Killing Floors or any room or equipment where brine, saturated atmosphere, low temperatures or wet surfaces prevent the use of ordinary paint or enamel.

# DAMP-TEX

*The Enamel That Goes on Water-Soaked Surfaces*

A special combination of pigments and synthetic oils and resin.  
Dries with enamel-like gloss. Made in white and colors.

**Steelcote Manufacturing Co.**

GRATIOT AT THERESA, ST. LOUIS, MO.

INTERNATIONAL MFRS. OF PAINTS, VARNISHES AND ENAMELS

# OBSOLESCENCE MEANS WASTE



Yes—an old Stuffer that leaks air causes spoilage, breaks down goodwill, and wastes money. A worn cover though it lets only a few pounds of meat a day drop to the floor, wastes profits. "Cranky" operation, piston sticking, cover jamming, wastes time and labor.

## MODERN BUFFALO

Means smooth economical operation. Guaranteed leak-proof piston can be quickly adjusted without removing from cylinder. Vacuum rapidly returns piston to filling position. Arch swings easily on replaceable bushings and quick opening cover fits securely into heavy safety ring. Non-corrosive smooth operating valves and other quality features mean long life and extra profits.

**JOHN E. SMITH'S SONS CO.  
50 BROADWAY, BUFFALO, N. Y.**

11 DEXTER PARK AVE., CHICAGO  
5131 AVALON BLVD.,  
LOS ANGELES

612 ELM ST., DALLAS  
360 TROUTMAN ST.  
BROOKLYN, N. Y.  
151 VASSALL ST., WOLLASTON, MASS.

---

**BUFFALO** *leak proof* **STUFFERS**

---



PACKAGING OUR NEW  
PRODUCT'S GOT ME WORRIED.  
SHOULD IT BE IN METAL  
OR FIBER?

WE'RE LEAVING THAT UP  
TO AMERICAN CAN.  
THEY'VE GOT THE ANSWER  
TO QUESTIONS LIKE THAT.

"For years they've been making *both* types of containers. They're the largest company in the field. And we can count on getting impartial, expert advice from them. What's more, any container *they* recommend has been through a lot. Their engineering staff has tested it in the laboratory. And their marketing staff has also checked it. We *know* the container's right before we get it. Besides, American Can has factories all over the country. They can take care of orders from anywhere right away. American Can will do a job for us, all right, and do it well."

CANCO

AMERICAN CAN COMPANY, 230 PARK AVENUE, NEW YORK, N. Y.  
104 SO. MICHIGAN AVE., CHICAGO • 111 SUTTER ST., SAN FRANCISCO

# THE NATIONAL PROVISIONER

*The Magazine of the Meat Packing and Allied Industries*



Official Organ Institute of American Meat Packers

Volume 103

AUGUST 31, 1940

Number 9

## EDITORIAL STAFF

J. B. GRAY  
*Editor*  
EDWARD R. SWEM  
*Managing Editor*  
VAL WRIGHT  
*Associate Editor*  
M. A. ADAMS  
*News Editor*



Published weekly at 407 So. Dearborn St., Chicago, Ill., U. S. A., by The National Provisioner, Inc.

Yearly subscription U. S., \$3.00; Canada, \$4.00; foreign countries, \$5.00. Single copies, 25 cents.

Copyright 1940 by The National Provisioner, Inc. Trade Mark registered in U. S. Patent Office. Entered as second-class matter, October 8, 1919, at the post office at Chicago, Ill. under act of March 3, 1879.



## DAILY MARKET SERVICE

(Mail and Wire)  
E. T. NOLAN  
C. H. BOWMAN  
*Editors*

The National Provisioner Daily Market Service reports daily market transactions and prices on provisions, lard, tallow and greases, sausage materials, hides, cottonseed oil, Chicago hog markets, etc.

For information on rates and service address The National Provisioner Daily Market Service, 407 So. Dearborn St., Chicago.

## Contents

	Page
NEWS HIGHLIGHTS OF THE WEEK	
Schedule of Meat Drive Regional Meetings	7
Canada Packers, Ltd., Has Good Year	7
Congscription and Packer Employes	7
Tobin Urges Meat Campaign Participation	8
Analysis of the Hide Situation	10
Questions About New Lard Definition	9
Hydraulic Drive Used in Packinghouse	11
Meat and Food Supplies to be Ample	15
Lard Exports Set Six-Year Record	23
New Equipment and Supplies	37
Up and Down the Meat Trail	18

Classified Advertisements, Page 42. Index to Advertisers, Pages 44, 45.

PAUL I. ALDRICH  
*President and Editor Emeritus*

ALFRED W. B. LAFFEY  
*Vice President and Sales Manager*

E. O. H. CILLIS  
*Vice President and Treasurer*

RICHARD VON SCHRENK  
*Assistant to President*

THOS. McERLEAN  
*Secretary*

PUBLICATION OFFICE: 407 S. DEARBORN ST., CHICAGO, ILL.

PROMOTION AND CIRCULATION  
GEORGE CLIFFORD, *Manager*

## ADVERTISING REPRESENTATIVES

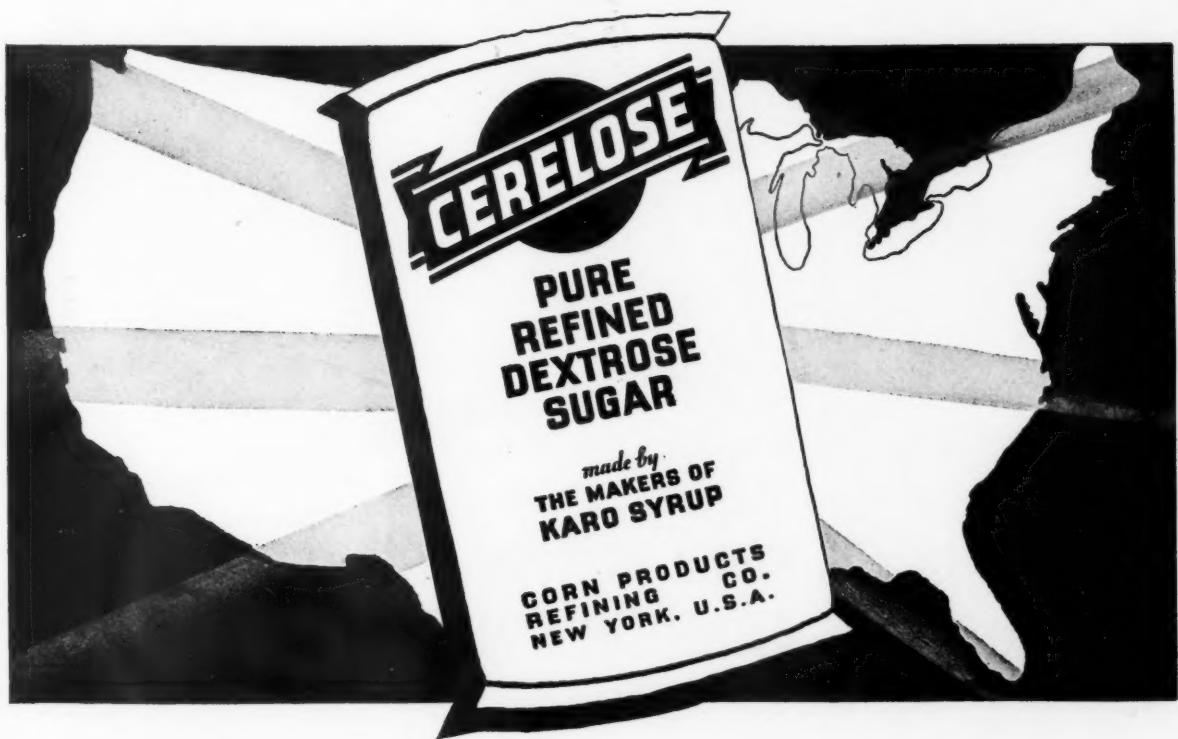
CHICAGO: LESTER I. NORTON, 407 S. Dearborn St., Chicago, Ill.  
H. SMITH WALLACE, 407 S. Dearborn St., Chicago, Ill.

NEW YORK: HARVEY W. WERNECKE, 300 Madison Ave., New York, N. Y.

LOS ANGELES: DUNCAN A. SCOTT & CO., Western Pacific Building, Los Angeles, Calif.

SAN FRANCISCO: DUNCAN A. SCOTT & CO., Mills Building, San Francisco, Calif.

# PRAISED BY MEAT PACKERS FROM COAST-TO-COAST



Cerelose, pure Dextrose sugar helps develop and protect color in meat. In fresh sausage Cerelose protects the desired color. In all kinds of sausage Cerelose helps to develop that good color. Meat packers are enthusiastic in their praise of Cerelose as

an aid in the fixation of color. They also appreciate its economy.

For further information about this pure Dextrose sugar write CORN PRODUCTS SALES COMPANY, 333 North Michigan Avenue, Chicago, Illinois.

## CERELOSE HELPS DEVELOP AND PROTECT COLOR IN MEAT

# Portrait of Your Toughest Customer...



## Be sure you make sausage with the flavor she wants... Use ARMOUR'S NATURAL CASINGS!

- This is Mrs. Housewife — your toughest customer!

She buys sausage that appeals to her taste . . . and all the sales-talk in the world won't sell her any other!

That's why you'd be smart to supply your dealers with sausage in Armour's Natural Casings! . . . Then you're *sure* its delicious flavor will reach the consumer intact.

You see, Armour's *Natural Casings* are natural protectors of your product's flavor and

juiciness. Their tenderness and ability to hold their shape guarantees not only good eating, but the attractive, well-filled appearance that means so much to sales! And the porous texture of Armour's Natural Casings permit the amount of smoke penetration you want.

Your Armour Branch House can supply you with casings to fill any and all of your needs. Phone today for last-minute quotations and fast, efficient service.

# ARMOUR'S NATURAL CASINGS

ARMOUR AND COMPANY • CHICAGO

# This Week's NEWS HIGHLIGHTS

## Nationwide Packer, Retailer Meetings on Campaign Plans

WITH the beginning of the national advertising campaign to promote the consumption of meat just a little more than a month away, meat packers and their salesmen, retail meat dealers and others in all parts of the country are gearing their organizations to tie in and cash in on the program.

In order to inform meat packers, the Institute of American Meat Packers, the organization sponsoring the campaign, is now conducting meetings in principal cities throughout the United States. Two types of programs are being presented concurrently at regional meetings in both the West and the East. Western meat packers are attending, or will attend, meetings at which the complete program of the campaign, as it has been worked out for the first four months, is being outlined in detail.

The Institute's regional meetings in the Midwest and East are giving meat packers in those localities their first opportunity to see the general presentation of the advertising campaign. Meetings at which the four months' schedule of the advertising program will be given in detail will be held soon in the Midwest and East.

### For Dealers and Salesmen

Beginning next week, the Institute and its members will stage mass meetings of retail meat dealers and packer salesmen in principal cities throughout the country. The retailer meetings will be held during the entire month of September in an effort to acquaint dealers with the program before it gets under way. The first consumer advertisement—a two-page, four-color spread—will appear in *Life* magazine on September 27. The same advertisement will appear in the October 5 issue of the *Saturday Evening Post*. Similar advertisements will follow in 16 leading magazines and in newspapers in key cities throughout the United States.

Meetings for meat packers in the Midwest were held last week in St. Louis, Cincinnati and Louisville. In the

(Continued on page 36.)

### Meat Campaign Regional Meetings

#### MIDWEST AND EAST

Rochester, N. Y.—September 4, 6 p.m., Hotel Rochester.  
Boston, Mass.—September 6, 6:30 p.m., Hotel Statler.  
New York, N. Y.—September 9, 6:30 p.m., Hotel Pennsylvania.  
Philadelphia, Pa.—September 11, 6:30 p.m., Bellevue-Stratford.  
Baltimore, Md.—September 13, 6:30 p.m., Hotel Emerson.  
Pittsburgh, Pa.—September 16, 6 p.m., Roosevelt hotel.  
Cleveland, Ohio.—September 18, 6 p.m., Mid-Day Club.  
Detroit, Mich.—September 20.

#### WESTERN

Phoenix, Ariz.—September 4.  
Los Angeles, Cal.—September 4, 7:30 p.m., Biltmore hotel.  
San Francisco, Cal.—September 6, 7:30 p.m., Palace hotel.  
Sacramento, Cal.—September 7, 2 p.m., Senator hotel.  
Portland, Ore.—September 9, 6 p.m.  
Seattle, Wash.—September 10, 6 p.m.  
Spokane, Wash.—September 11, 6 p.m.  
Boise, Idaho.—September 12, 6 p.m.  
Ogden, Utah.—September 13, 6 p.m.  
Denver, Colo.—September 16, 6 p.m.

#### MIDWEST AND EAST (Second Series)

St. Louis, Mo.—September 3.  
Cincinnati, O.—September 5, 7:30 p.m., Netherland-Plaza hotel.  
Louisville, Ky.—September 6, 7:30 p.m., Kentucky hotel.  
Rochester, N. Y.—September 9.  
Boston, Mass.—September 10.  
New York, N. Y.—Sept. 12.  
Philadelphia, Pa.—Sept. 16.  
Baltimore, Md.—September 17.  
Pittsburgh, Pa.—September 19.  
Cleveland, O.—September 23.  
Detroit, Mich.—September 24.

### CANADA PACKERS' SALES AND NET RISE IN 1939-40

STIMULATED activity due to greater British needs resulted in a 14.2 per cent increase in the volume of sales of Canada Packers, Ltd., Toronto, Ont., during the fiscal year ended March 28, 1940, according to a financial statement just released by the company. Net profit of the company for the year totaled \$1,667,809.78 compared with the previous five-year average of \$1,293,726.49. In presenting the report to shareholders, President J. S. McLean stated that the year divided itself into two periods, the five months prior to the war and the subsequent seven.

In the first period there was an increase of 10 per cent in the company's tonnage sales, resulting from the accumulation of reserves by Britain and European countries. In the second period there was a marked step-up in volume and margin of profits; the improvement in this latter period was due in part to increased shipments to Britain, but to a larger degree to greater industrial activity within Canada, which began with the war and expanded as

(Continued on page 35.)

### CONSCRIPTION AND EMPLOYES

Reports from Washington indicate that men employed in essential industrial or agricultural pursuits would probably not be selected for military service under the conscription bill passed by the Senate this week. Local draft boards would decide on the men to be exempted from among those called.

Unskilled workers, it is pointed out, would probably have little chance of being placed in the exempt or deferred class, but skilled workers, even in non-essential industries, might generally be excused from service. One analyst suggests those to be drafted would be mostly single men with unimportant jobs or no jobs.

Employers would be required to hire conscripts, unless it was impossible or unreasonable for them to do so. Draftees denied re-employment could appeal to federal courts for ruling.

# ENTIRE INDUSTRY TO BENEFIT FROM DRIVE

## Packer Leader Urges All To Participate in Meat Campaign

By F. M. TOBIN

*President, Rochester Packing Co.*

DURING the years that I have spent in the meat packing industry I have seen the population of this country increase some 25 per cent. At times during this period, the value of our industry's output has been larger than that of any other, including the great iron and steel industry, the automobile industry, the oil industry, and many others. During all of this period, the earnings of the meat packing industry have not been commensurate with its size, its importance, and the service it renders.

Often we see a single company in some other industry achieving legitimate earnings in a single year which are larger than those made by the entire meat packing industry, which, if there ever were an absolutely essential and necessary industry, is one.

Not only have earnings been inadequate, but, what to my mind is worse, our business has not kept pace with our potential market. Although our population has increased by about 25 per cent in the last two decades, the quantity of meat handled in the industry in 1939 was apparently less than 4 per cent greater than it was 20 years ago.

### Many Need More Meat

Yet the need and opportunity for enlarging the market for our product are abundant. Anemia, pellagra, and other diseases of dietary deficiency are still numerous in this country, not to mention the thousands of cases of borderline deficiency not yet enrolled in the records of physicians or hospitals. Breakfast, all too often, has become only a momentary pause in the morning's swift routine—a preparation which is often hopelessly inadequate for the dietary needs of the morning hours, especially in the case of children with their high consumption of energy and their constant need of protein for growth as well as for tissue repair.

Thousands of women and others misguided take pride in their reducing diets, based more or less on the principle of starvation itself, and thereby invite ill health and weakness if not some complication still more dangerous. There is an abundant market for meat which is yet untouched, and today's challenge to our industry is for ways of making our product better known and appreciated, or more conveniently or economically available to these millions of potentially more liberal buyers.

There is no need to dwell here on the reasons for poor and declining business



in the meat industry. We know that the industry can advertise and merchandise its products more aggressively and more effectively. And it does seem to me that, for the first time in our history, we now have in hand, if we take hold of it and utilize it properly, an instrument which will enable our industry to regain its rightful place in the sun.

I refer to the general meat advertising and merchandising campaign which is now in progress.

I am convinced, out of observation and experience during my lifetime of association with the meat business, that this campaign will be most beneficial to the entire livestock and meat industry.

I understand that there has been a



### EMBLEM FOR PARTICIPANTS

This is a design for use on stickers, electros, stencils, letterheads, invoices, signs, etc., by packers who are participating in the advertising and sales program of the Institute of American Meat Packers. Use of the new name "American Meat Institute" for advertising purposes has been approved by the Institute board of directors.

gratifying response from members of the meat packing industry in all parts of the country, that packers everywhere are getting behind the campaign and plan to tie in with the program in every possible way.

This is encouraging, for if we in the meat industry will all work together in this campaign, and keep on doing so—for it is not a one-year, or a two-year, or a three-year job but a continuous and permanent need—the campaign will surely be a success.

In this connection, I want to urge any packers of my acquaintance who may not have agreed as yet to participate in the campaign, as well as any such there might be who do not know me, to join with the rest of the industry in this progressive and, to me, inspiring move.

There is an unparalleled opportunity before this industry to expand our present business and to make it a growing, thriving business, with adequate earnings. I am hopeful that no member of the industry will overlook this opportunity to help both himself and the entire meat packing industry.

### EXCESS PROFITS TAX

A complex excess profits tax bill, with a dual set of rates ranging from 20 to 50 per cent, was passed this week by the House and will be sent to the Senate. In addition to the sharply graduated excess profits levy, the bill provides a means by which corporations over a five-year period may amortize the cost of new plants and equipment developed and purchased under the defense program.

As finally revised, the excess profits tax, like the original recommendations of the tax subcommittee of the ways and means committee, upon which public hearings were held, gives corporations the right to elect the taxing method—either upon the basis of average earnings or invested capital.

However, where it was originally proposed that the same set of rates would apply whether corporations computed their tax on the basis of average earnings or invested capital, the bill sets up a dual set of rates.

It also differs in the manner in which the tax is to be applied. The tax subcommittee proposed that the rates apply against the excess profits of a corporation which exceed a certain percentage of the excess profits credit. The new rates are applicable to specified amounts which are in excess of the credit.

# PACKERS ASKING QUESTIONS ABOUT NEW LARD DEFINITION

QUESTIONS received by THE NATIONAL PROVISIONER, particularly from operators of small inspected plants, show that there is considerable speculation just now about the effect on processing and merchandising methods of the new definitions for lard and rendered pork fat, established recently by the U. S. Department of Agriculture. These definitions were originally announced as:

**LARD.**—The fat rendered from fresh, clean, sound fatty tissues from hogs in good health at the time of slaughter, with or without lard stearin or hardened fat. The tissues do not include bones, detached skin, head fat, ears, tails, organs, windpipes, large blood vessels, scrap fat, skimmings, settling, pressings and the like, and are reasonably free from muscle tissue and blood.

**RENDERED PORK FAT.**—The fat, other than lard, rendered from clean, sound carcasses, parts of carcasses, or edible organs from hogs in good health at the time of slaughter, except that stomachs, tails, bones from the head and bones from cured or cooked pork are not included. The tissues rendered are usually fresh, but may be cured, cooked or otherwise prepared and may contain some meat food products. Rendered pork fats may be hardened by the use of lard stearin or hardened lard, or by rendered pork fat stearin or hardened rendered pork fat.

The official order establishing the new definition of lard stated that lard could contain "lard stearin or hardened lard." This change in the definition from that shown above rules out any possibility of using hardened rendered pork fat in lard, and thus definitely relegates rendered pork fat to a secondary position.

Obviously, many of the questions now in the minds of packers can be answered only after the industry has had some experience in producing and merchandising lard and rendered pork fat after November 1, 1940. How consumers will regard rendered pork fat, for example, and the character of demand for this product, remain to be seen. It is also possible that packers may ask for rulings from the Department of Agriculture to clear up some questions of processing.

The following questions have been asked THE NATIONAL PROVISIONER by packers since the definitions were published in the August 17 issue. Packers and packer employees familiar with lard production, merchandising and markets were consulted in each case. The answers are the opinions of these men.

**Q.—What is the purpose of the definitions?**

**A.—**Ostensibly, improvement in the quality of lard. Every packer is aware, however, that while the characteristics

of the fats from which lard is rendered have some influence on the quality of the finished product, the mere fact that only specified fats may be used for lard after November 1, does not guarantee that the resulting lard will be any better, or that quality will be more uniform than at present. The manner in which fats are handled prior to tanking, and the methods of rendering and refining probably have as much influence on quality as the character of the fats used. In other words, limiting the use of fats for lard to certain portions of the carcass does not ensure production of better quality lard.

**Q.—If lard of high average quality is the aim of the department, would it not have been better to have attempted to bring about this result with lard specifications, rather than with a definition of the materials from which lard can be made?**

**A.—**Most packers think so.

**Q.—Will separate equipment be required for the production of lard and rendered pork fat?**

**A.—**This question cannot be answered at this time.

**Q.—What effect will the definition have on total lard production?**

**A.—**Production will probably be reduced approximately 10 to 15 per cent.

**Q.—Fresh bones yield lard of high quality. Why are they ruled out under the definition?**

**A.—**The reason is not clear. It is possible the intent of the department is to

## Canadian Hog Production Will Set Record in 1940

MONTREAL.—Hog production in Canada in 1940 will be the greatest on record, the Dominion Bureau of Statistics reports. The 1940 spring pig crop was 39 per cent greater than that of 1939 and farmers also reported an increase of 27 per cent in the number of sows expected to farrow in the fall of this year. The increase in the spring pig crop resulted in a gain of 37 per cent in the number of hogs on farms on June 1, 1940, to a total of 5,882,000 head, which is the highest on record.

The increase in 1940 is a continuance of the upward trend in hog production which commenced in the spring of 1939. Two years of relatively favorable prices for hogs and an abundance of low priced feed, in addition to the war market in England, have stimulated hog raising. As a result of the increase in the pig crop, marketings will reach new highs during the remainder of this year and early months of 1941. An increase of over 40 per cent is expected.

reduce lard production as well as to improve quality.

**Q.—If restricting the fats used in lard results in better quality, may the packer expect an increase in lard prices by an amount sufficient to raise his total revenue from pork fats?**

**A.—**He may expect it, but he probably will not realize it. Packers do not believe the use of the fats specified will have any effect on lard prices. However, it seems to be certain that rendered pork fat will sell for less than lard. A packer's revenue from pork fats, therefore, may be lowered to the extent that 10 to 15 per cent of his former lard production will move into consumption at a discount.

**Q.—It may be assumed that rendered pork fat will serve as well as lard for some purposes (commercial baking). However, it appears certain that the former product will sell for less than lard. If production of rendered pork fat is limited to a relatively small amount, and demand for it is considerable, will not the price of lard be depressed?**

**A.—**If this is the effect of any competition between lard and rendered pork fat, the purpose of defining fats for use in lard will be defeated. It is difficult to forecast the effect which rendered pork fat may have on the lard market, but some packers do not foresee that lard prices will be influenced materially one way or the other.

**Q.—Will the new definition of lard be helpful in improving the competitive position of lard in the shortening field?**

**A.—**Such a result is not foreseen soon, if ever.

**Q.—How will rendered pork fats be marketed?**

**A.—**There will probably be a good outlet for this product in the baking industry. Some packers think there will not be much demand for it from housewives, although it will be a pure, wholesome product of high shortening value. It is believed that the mere fact that the packer must distinguish between lard and rendered pork fat will be enough to give consumers the impression that the latter product is inferior. As a matter of fact, some rendered pork fat may be a better product for general household use than some lards.

**Q.—Will it pay the small packer to produce rendered pork fat?**

**A.—**Whether or not it will pay to produce rendered pork fat will depend on circumstances, particularly the quantity produced and the price at which it can be sold. If separate equipment is required to make rendered pork fat, some small packers may prefer to send the raw fats to the inedible tank rather than to invest in machinery with which to produce a small quantity of low-priced product.

**Q.—Do packers anticipate that it will be advantageous to revise production procedure to produce the new lard?**

**A.—**Changed procedure may be advisable in a few instances. It has been

(Continued on page 35.)

# HIDE SUPPLY, DEMAND AND PRICE SITUATION ANALYZED

**W**HAT is the situation in hides? How large are stocks of this most important packinghouse by-product? Why have hide prices declined since the high of last October?

How is the domestic hide market affected by curtailment of European demand for South American hides? Have hide imports increased? Are greater imports expected?

What are the prospects for hide consumption in this country? Will the hide outlook be affected by the preparedness program?

Analysis of the hide situation and some correlation of the various factors in it appear to be desirable at this time. There has been much comment on the outlook recently (not all of it well-informed) and a wide range of predictions on future developments. These forecasts, coupled with the obscure and sometimes contradictory factors in the situation (the embargo on hide exports) have led to some confusion.

This article will not attempt to predict the future course of the hide market; it will simply marshal the facts for the packer to use in determining his own policies.

**SUPPLY.**—U. S. stocks of cattle hides and leather—raw, in process and finished—are not only normal, but may probably be considered sub-normal. Total stocks at the end of June were 12,753,000 hides against 13,151,000 hides on the same date in 1939. Stocks in 1940 have been running consistently below the 1939 level.

Packers are well sold-up and, except for a few descriptions, have few hides on hand. The industry in general (and particularly the larger producers) has been selling as it went along, being content to obtain current prices and keep

its product moving. This policy of current realization is apparently very strong; there is no desire for a repetition of 1937 when prices went down, down, down while packers held their hides.

U. S. stocks of hides and leather at the close of each of the six months, January through June, were:

	In Process and Finished 000	Raw 000	Total 000
June, 1940.....	8,900	3,844	12,753
June, 1939.....	9,347	3,804	13,151
May, 1940.....	8,820	3,696	12,516
May, 1939.....	9,270	3,807	13,077
April, 1940.....	8,730	3,799	12,529
April, 1939.....	9,347	3,804	13,151
March, 1940.....	8,888	3,670	12,558
March, 1939.....	9,229	3,780	13,009
February, 1940.....	9,203	3,684	12,887
February, 1939.....	9,699	3,676	13,375
January, 1940.....	9,357	3,672	13,029
January, 1939.....	9,868	3,734	13,602

Domestic hide production, as reported by the U. S. Department of Commerce, has been declining in recent months. Production in 1940, with comparisons:

	1940	1939
June .....	1,455,000	1,717,000
May .....	1,590,000	1,736,000
April .....	1,568,000	1,672,000
March .....	1,700,000	1,955,000
February .....	1,892,000	1,943,000
January .....	1,972,000	1,936,000

While federally inspected slaughter of cattle increased in July, and the kill for the first seven months of the year was greater than in 1939, slaughter dropped off in the first three weeks in August and during the balance of the year may be somewhat lighter than in 1939. Inspected slaughter in 1939 and 1940:

	7 Mos. 1940	7 Mos. 1939	5-yr. Avg.
Cattle .....	5,392,975	5,239,263	5,418,334

Hide imports were not abnormally large during the first six months of

1940. The total was 1,755,000 pieces against 1,679,000 in 1939. Allowing for exports, net imports in the first half of the year were 1,585,000 pieces against 1,432,000 in 1939. The rise in imports was largely due to a sharp increase in June volume compared with a year earlier; whereas, June, 1939, net imports were only 161,701 hides, this year's net receipts were 369,101 hides.

The degree to which import volume may increase in the next few months is uncertain. There have been some estimates that July imports totaled 500,000 to 600,000 hides; exact figures are unavailable.

Some analysts contend that the United States is the only potential market left for approximately 9 to 9½ million hides which South and Central America have customarily exported to Continental European and Mediterranean markets now closed by the British blockade. It is believed that good quality South American hides are being absorbed by Britain; it is the prospect of back-country, low quality production which may be offered here that is causing apprehension in the United States.

Such hides are unknown to American processors and would probably be unsuitable for use in this country. However, the possibility that they might be utilized, coupled with their low price, may induce some importation on a speculative basis. There have been reports that frigorifico slaughter has been cut in half recently, due to the lack of ships and meat demand from abroad.

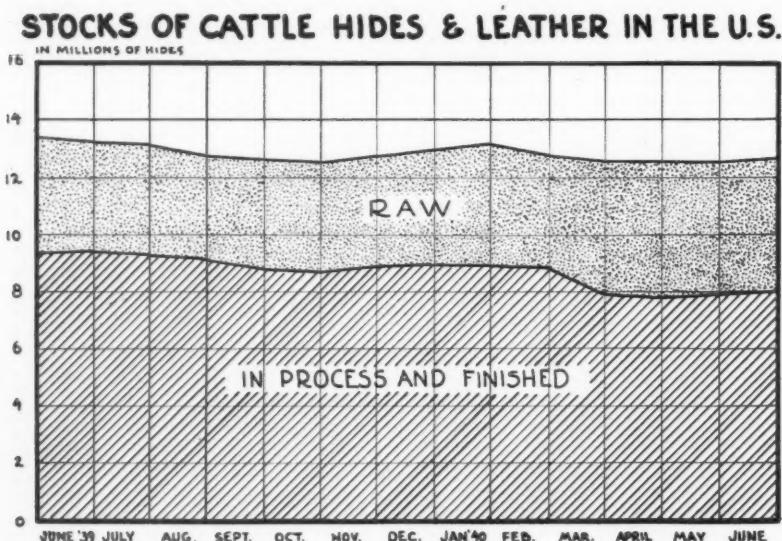
It is possible, of course, that the U. S. government might find it desirable to give support to South American hides, among other commodities, in connection with the program for hemispheric solidarity.

**DEMAND.**—Any weakness in the hide situation is believed to lie primarily on the demand side. Future improvement in business and consumer purchasing power, entirely apart from any demand arising directly from the government preparedness program, should be reflected in hide prices.

Shoe production so far in 1940 has been at a rate considerably below 1939. Production during the first six months of 1940 totaled only 192,207,951 pairs against 211,078,938 pairs in 1939. June output this year was 27,585,848 pairs compared with 32,312,819 pairs in June, 1939.

Most tanneries and shoe factories have been fairly busy in recent weeks; after a quiet period around Labor Day, production is expected to increase sharply. Government orders may play a fairly large part in the activity of some factories as the Army has called for bids on 1,000,000 pairs of service shoes, the largest single order since the World War. Other orders may materialize soon to equip National Guard and conscripted men, but it is doubtful if buying will approach the 27,000,000 pairs forecast by one government agency, which based its estimate on conscription of

(Continued on page 32.)



# HYDRAULIC DRIVE IN USE ON WOOL HOUSE CENTRIFUGAL MACHINE

By T. C. HAYES

*Chief Electrician, Wilson & Co.*

**R**EPEATED motor failures on centrifugal extractors in the wool house of the Wilson & Co. plant at Chicago led to an investigation by the electrical department of various methods of starting an electric motor on a very heavy inertia load without developing high temperatures in the motor windings as a result of high overload currents.

After thorough investigation, the traction type of hydraulic coupling, as manufactured by the American Blower Corp., was applied to one of two centrifugal extractors with the idea of determining the coupling's possibilities as a power transmitting device for heavy starting loads, when used with constant-speed squirrel cage electric motors and full voltage starting.

The application is believed to be the first of its kind in the United States. The success of this drive combination can best be determined from the fact that since the first unit was put into service, a second machine has been converted to fluid unit drive and a third new machine with similar equipment also has been put into service.

## How Skins are Handled

Wilson & Co. ships wool skins from various plants to the Chicago unit for further processing. The skins are washed with water when they are re-

## THE FIRST INSTALLATION

One of the two centrifugal extractors in the wool house of Wilson & Co., Chicago, which are equipped with fluid drives. The extractor basket in which the wet wool skins are wrung is 48 in. in diameter. Motor is a 7½-h.p., 440-volt, 3-phase, 60-cycle, 1,140-r.p.m.



cived at the plant, and the water is then wrung out in the extractors equipped with hydraulic coupling, hung for partial air drying and painted. The wool is pulled from the hides, graded, and finally dried in ovens before being placed in storage bins. The various grades of wool are then baled and sold.

The centrifugal extractor, which has a 48-in. basket, is shown on this page. The 7½-h.p., 440-volt, three-phase, 60-cycle, 1,140-r.p.m. squirrel cage motor is mounted vertically on its ring base and is bolted to an adapter which gives clearance for rotating members of the hydraulic coupling. The coupling is hub mounted to the electric motor shaft.

The driven shaft of the fluid unit is supported by an outboard bearing mounted on the adapter base. A V-belt sheave is overhung from the outboard bearing and a suitable V-belt drive to a

sheave on a spindle at the bottom of the extractor basket.

Extractor was originally equipped with a centrifugal block friction clutch mounted on the electric motor shaft. Due to the high number of cycles per hour necessary to maintain a production schedule, excessive wear of the friction blocks was experienced, with resultant periodic seizing of the clutch.

When this seizing occurred the motor rotor came up to speed at the same acceleration rate as the loaded basket, with corresponding high currents. It was at these times that motor failures occurred. Examination of the design of the fluid unit showed that it was impossible to have motor failures caused by seizing since there was no mechanical connection between the motor and drive sheave.

The traction type of hydraulic coupling shown on page 13 consists of an (1) impeller which is connected to electric motor shaft; (2) a runner, the shaft of which is connected to the load; (3) an outer casing with its seal which retains the oil in the working circuit; (4) a reservoir which has a capacity to permit control of torque transmitting characteristics of a certain size of unit in conjunction with (5) a baffle, which is an annual ring fastened into the runner at the inner diameter, thereby making possible the controlling of the current drawn from the supply line to a previously determined value.

The torque transmitting capacity of a certain size of fluid unit varies as the square of the impeller speed. This characteristic is shown in chart (left). By changing characteristics of this unit by the means described above, different torque transmitting characteristics may be obtained with corresponding variation in current input value.

Since the motor is capable of developing more torque than the fluid unit can transmit, at motor speeds lower than that point where the coupling

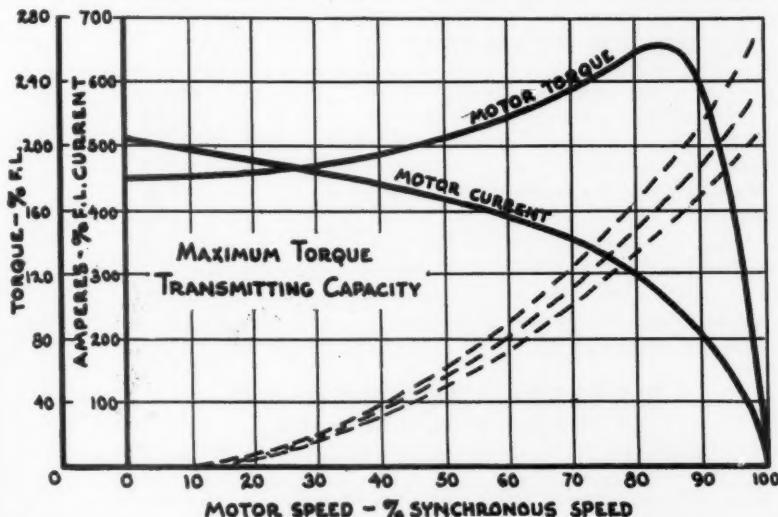


FIGURE 1.—Dotted lines show how torque can be varied by amount of fluid in coupling. Beginning with top dotted curve, stalled torque is shown for over-filled, normally-filled and under-filled coupling.

# DID YOU KNOW THAT...



**THE PRICE OF BEEF HIT AN ALL TIME HIGH OF \$48 PER POUND AT CIRCLE CITY, ALASKA, DURING THE KLONDIKE GOLD RUSH?**



**IN THIRD-CENTURY IRELAND, THE CUT OF MEAT A MAN RECEIVED DENOTED HIS STATION IN LIFE. THE KING HAD FINE STEAKS...PHYSICIANS GOT THE HEAD... SHANKS WENT TO JESTERS...MUSICIANS WERE GIVEN SHINS...SERVANTS ATE SCRAPS?**

**T**he Australian Chemical Institute is reported to have developed a liquid form of meat that retains all the flavor and food value of regular meat?

## AND DID YOU KNOW THAT...

...whiter, cleaner, smoother, beef and veal can be had at lower cost with Bemis Bleaching Cloths? That dealer and consumer sales will be made more easily at better prices? That Bemis Bleaching Cloths are more absorbent...more efficient and durable?

That they can be used over and over again, are ready to put on, fit better because they are cut to size and have edges double-hemmed to prevent ravelling? Write today for samples and prices. No obligation.



**BEMIS BRO. BAG CO.**  
420 Poplar Street, St. Louis, Mo.

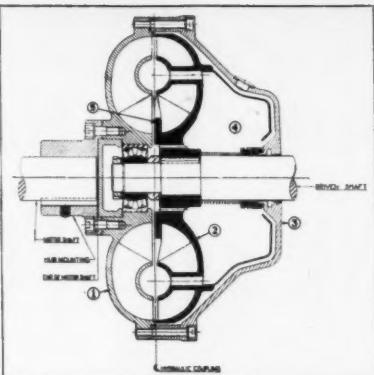
OFFICES: Boston • Brooklyn • Buffalo • Chicago • Denver • Detroit • East Pepperell • Houston • Indianapolis • Kansas City • Los Angeles • Louisville • Memphis Minneapolis • New Orleans • New York City • Norfolk • Oklahoma City • Omaha Peoria • Pittsburgh • Salina • Salt Lake City • San Francisco • Seattle • Wichita

torque transmitting capacity equals the torque developed by the motor, the motor rotor will immediately accelerate to nearly full speed with a rapid reduction of current input. Regardless of the load in the basket, the electric motor starts and accelerates to speed as if it were driving a centrifugal pump.

On each cycle of its operation, the basket of the centrifugal machine is loaded with from 350 lbs. to 550 lbs. of wet wool, the weight depending on the weight of an individual skin and the amount of water in the wool. The time of acceleration varies from one minute to one minute and 20 seconds, depending on the load. A maximum speed of production of 15 cycles per hour is maintained.

Figure 2 shows the current input of a direct-connected motor and the coupling-equipped motor. It will be noted that the interval of time for the current to drop from 510 per cent F.L. current to 185 per cent F.L. current is very short. It represents the time for acceleration of the motor rotor from zero speed to the near full load speed as is shown in Figure 1.

The use of a larger direct-connected motor was among other methods considered. A motor twice larger than the original equipment was suggested. It is true that a larger motor, due to the higher torque developed, would have brought the extractor basket up to full speed more rapidly than the smaller motor, and heat generated in the windings of the larger motor would have



TRACTION TYPE HYDRAULIC COUPLING

- 1) Impeller connected to drive shaft.
- 2) Runner, shaft of which is connected to load.
- 3) Outer casing which retains oil in working circuit.
- 4) Reservoir.
- 5) Baffle.

been less destructive than the direct-connected smaller motor on the same load.

However, the hydraulic coupling-equipped smaller motor did give a satisfactory cycle of operation and duplicated the performance found in the machine as it was originally purchased with the centrifugal block clutch. The danger of motor failures was eliminated; by the addition of the fluid drive the original motor, lines and starters were found to be adequate.

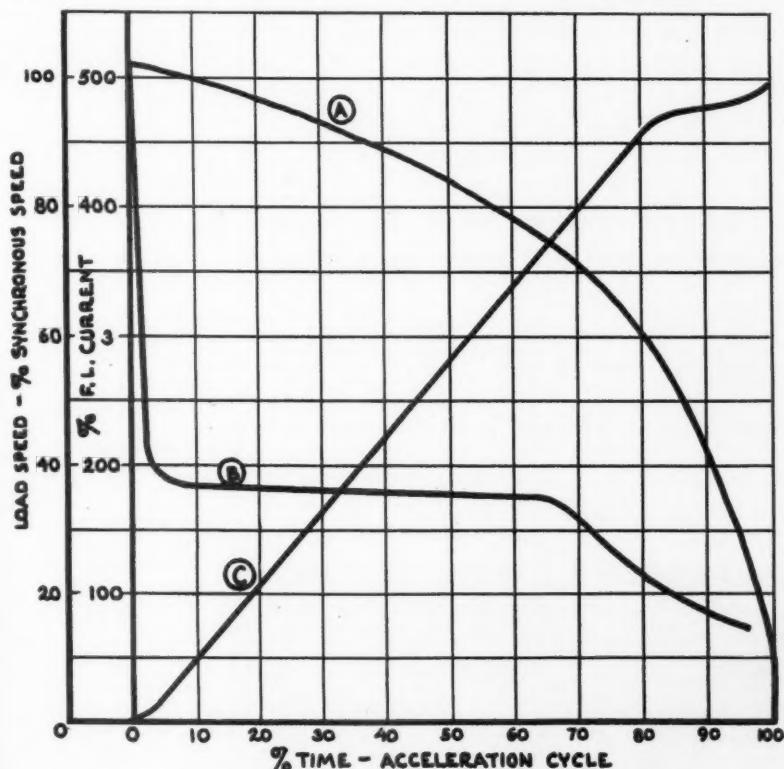


FIGURE 2.—A) Current consumption of motor direct-connected to extractor; full voltage starting. B) Current consumption with hydraulic coupling-equipped drive; full voltage starting. C) Load speed of coupling-equipped extractor.

## How Canada Packers, Ltd. Aids Conscripted Employees

**EDITOR'S NOTE.**—A Canadian packer's plan for aiding employees conscripted for military training (one month) will be of interest to packers in this country whose workers may soon be called under the National Guard or selective service acts.

In arranging wage allowances for employes called up for military training, Canada Packers, Limited, Toronto, Ont., has introduced an interesting variation on the plans being followed generally in Canadian industry.

The Canada Packers' plan, suggested by George Ayers, employee representative on the company's board of directors, confines assistance to dependents. The company statement is as follows, in part:

"Men undergoing military training for home defense, whether by enlistment or draft, will receive \$1.20 a day (from the government), plus additional payments for rank, etc. For a single man such remuneration appears adequate, since at camp a man's expenses are almost nil."

"Where the pinch falls is upon dependents (wives, children or parents) since dependents of these men receive none of the allowances which are made to dependents of members of the Canadian Active Service Force. The company, therefore, proposes to assist dependents of men undergoing military training as follows:

**MARRIED MEN.**—Allow half of the difference between army pay and normal company pay, the total allowance not to exceed the scale of allowances to dependents of C.A.S.F. members (\$35 per month for wife, \$12 per month for each dependent child 16 years old or younger, but the allowance will be paid in respect to not more than two children).

**SINGLE MEN.**—We shall allow to single men who are the sole support of their parents, half of the difference between army pay and their normal company pay, the total allowance not to exceed \$25 per month. Allowances on lesser scale may be made to single men who contribute to, but are not the sole support of parents or dependent brothers or sisters.

"The period in respect to which allowances shall be made is not to exceed one month. When the training period is less than one month, allowances will be proportionately reduced. Only regular employees who have been in the company's service for 12 months preceding their period of military training will be eligible for such assistance."

## SAVING HOG EARS

*Does it pay to save hog ears?* If so, are those you save free of fat that would yield more than the ear value? It might pay you to read "PORK PACKING," The National Provisioner's pork plant handbook.

# Stimulate Sales of Your Products with **SYLPHCASE\*** and **SYLPH-THIN**

(TRADE MARK)

*"Quality's Best Attire"*

Make it easy for your dealers to push your line of pre-processed meats by packaging them in **SYLPHCASE** and **SYLPH-THIN** casings.

These new casings have sheen, transparency and magnetic highlights for perfect product presentation.

Today—particularly in the purchase of food—consumers insist on seeing the product.

Packaged in **SYLPHCASE** and **SYLPH-THIN** casings, attractively printed with your name, brand, etc., your products will be identified in the consumers' mind for repeat purchases.

**SYLPHCASE** and **SYLPH-THIN** have everything in production requirements—sheerness, strength, controlled stretch, etc., and economy in cost.

**SYLPHCASE** for emulsion products and "stuffed" meats.

**SYLPH-THIN** for pre-processed meats, such as loaves, hams, picnics, etc.

\*Reg. U. S. Pat. Off.



## SYLVANIA INDUSTRIAL CORPORATION

SYLPHCASE DIVISION

Executive and Sales Offices: 122 E. 42nd St., New York — Works: Fredericksburg, Va.

Branches or Representatives:

ATLANTA, GA.  
BOSTON, MASS.

78 Marietta Street  
201 Devonshire Street

CHICAGO, ILL.  
DALLAS, TEX.

427 W. Randolph Street  
812 Santa Fe Building

PHILADELPHIA, PA.

260 South Broad Street

CANADIAN AGENT—Victoria Twine and Paper Co., Ltd.—TORONTO—MONTREAL—HALIFAX.



# SURVEY SHOWS AMPLE FOOD AVAILABLE FOR 1940-1941

THE destruction and dislocation of food supplies incident to the war in Europe have recently focused attention on the food situation in the United States and on the ability of this country to furnish supplies to offset possible European food shortages if occasion should arise.

To meet the widespread interest in this problem, the U. S. Bureau of Agricultural Economics has brought together the facts regarding the prospective supplies of important foodstuffs in the United States during the next 12 months.

This survey—which is based on the July crop report—indicates that abundant supplies of nearly all foodstuffs will be available for the coming year.

The amount will be in line with those of recent favorable years, and considerably above the level of the five-year period 1925-29.

The estimated supplies of various foodstuffs for 1940-41 are summarized in Table 1, together with comparative estimates for previous years. These figures show the total supplies available during each year, including carry-over stocks on hand at the beginning of the new crop year plus production during the following 12 months.

To determine the amounts of food that will probably be available for domestic consumption during 1940-41, the total food supplies for the year must be reduced by the amounts of prospective exports, by feed and seed requirements

Will domestic food supplies for the next 12 months be small, normal or exceptionally large? How much meat and lard will be available? How great are supplies of competing and non-competing foods? What quantities of meat and other foods will be available for export, and what are the prospects for export trade?

The U. S. Bureau of Agricultural Economics has answered these questions in the survey published here. While it was impossible to give the bureau's comments on 1940-41 prospects for all foods, the tables give a complete picture of the outlook. Meat packers should look beyond the meat data in the tables—to note the situation in poultry, dairy products, fats and other foods.

TABLE 1.—Summary of indicated total food supplies<sup>1</sup> in the United States in 1940-41, and comparisons with previous years

Commodity	Unit	Average 1925-29	1937-38	1938-39	1939-40	Indicated 1940-41
Meats other than poultry <sup>2</sup> .....	Mil. lbs.	17,058	16,520	17,108	18,838	18,832
Poultry meats <sup>2</sup> .....	Mil. lbs.	2,601	2,678	2,713	2,911	2,740
Eggs <sup>2</sup> .....	Mil. eggs	43,879	44,134	44,152	44,700	44,000
Butter <sup>2</sup> .....	Mil. lbs.	2,168	2,273	2,419	2,874	2,345
Dairy products other than butter, in terms of whole milk <sup>2</sup> .....	Mil. lbs.	56,014	64,000	64,748	66,681	67,480
Lard <sup>2</sup> .....	Mil. lbs.	2,437	1,783	2,022	2,342	2,530
Other domestic edible fats and oils <sup>2</sup> .....	Mil. lbs.	2,402	3,231	2,969	3,112	3,200
Imported edible fats and oils <sup>2</sup> .....	Mil. lbs.	11	681	749	585	540
Wheat.....	Mil. bu.	955	959	1,085	1,009	1,006
Bran.....	Mil. lbs.	1,222	1,717	1,643	1,427	1,467
Fruits—						
Fresh .....	1,000 tons	7,629	10,129	10,032	9,907	10,133
Canned .....	Mil. cases of 24 No. 2's	63.4	107.9	103.6	113.6	110.6
Dried .....	1,000 tons	639.0	736.3	784.5	747.7	660.8
Vegetables—						
Fresh .....	1,000 tons	5,058	6,255	6,647	6,680	6,700
Canned .....	Mil. cases of 24 No. 2's	88.6	127.0	122.6	117.1	118.3
Potatoes.....	Mil. bu.	349	395	374	364	371
Sweet potatoes.....	Mil. bu.	61.7	75.1	76.6	72.7	68.8
Dry edible beans <sup>3</sup> .....	Mil. bags	12.1	16.4	17.5	17.0	16.1

<sup>1</sup>Production plus carry-over of stocks at the beginning of the new crop year. Unofficial estimates are included where official estimates are not available.

<sup>2</sup>July-June production plus July 1 stocks.

TABLE 2.—Summary of indicated food supplies available for domestic consumption<sup>1</sup> in 1940-41, and comparisons with previous years

Commodity	Unit	Average 1925-29	1937-38	1938-39	1939-40	Indicated 1940-41 <sup>2</sup>	Maximum available 1940-41 <sup>2</sup>
Meats, other than poultry.....	Mil. lbs.	16,391	16,075	16,362	17,938	18,033	18,295
Poultry meats.....	Mil. lbs.	2,540	2,613	2,651	2,838	2,680	2,700
Eggs.....	Mil. eggs	38,827	40,458	40,185	40,600	40,000	40,200
Butter.....	Mil. lbs.	2,074	2,150	2,286	2,292	2,263	2,266
Dairy products other than butter, in terms of whole milk <sup>2</sup> .....	Mil. lbs.	51,623	58,783	59,780	61,475	62,068	62,459
Lard.....	Mil. lbs.	1,500	1,442	1,606	1,775	2,000	2,380
Other domestic edible fats and oils <sup>2</sup> .....	Mil. lbs.	1,881	2,645	2,250	2,870	2,500	2,575
Imported edible fats and oils.....	Mil. lbs.	338	487	545	415	370	370
Wheat <sup>4</sup> .....	Mil. bu.	504	498	523	516	508	514
Rice <sup>4</sup> .....	Mil. lbs.	819	1,115	963	1,084	1,127	1,177
Fruits—							
Fresh .....	1,000 tons	6,863	9,068	8,942	9,152	9,834	10,133
Canned .....	Mil. cases of 24 No. 2's	51.6	85.1	88.9	98.9	100.0	105.0
Dried .....	1,000 tons	317.8	365.9	376.3	442.8	400.0	560.0
Vegetables—							
Fresh .....	1,000 tons	5,058	6,181	6,413	6,517	6,700	6,700
Canned .....	Mil. cases of 24 No. 2's	74.5	111.0	100.3	107.0	108.0	113.0
Potatoes.....	Mil. bu.	294	334	312	307	315	315
Sweet potatoes.....	Mil. bu.	50.6	61.9	62.9	60.0	57.0	57.0
Dry edible beans <sup>3</sup> .....	Mil. bags	10.2	12.3	13.3	13.0	13.0	14.0

<sup>1</sup>In calculating total supplies of various classes of foods available for domestic consumption, no account was taken of quantities which usually are lost or wasted in marketing, and, therefore, these data should not be assumed to represent actual consumption.

<sup>2</sup>Total supplies less estimated exports and probable carry-over into 1941-42. In the case of wheat, rice, potatoes, sweet potatoes, and dry edible beans, quantities expected to be used for seed and feed are also deducted.

<sup>3</sup>Total supplies less a minimum carry-over into 1941-42 with no allowance for exports. In the case of wheat, rice, potatoes, sweet potatoes, and dry edible beans, quantities expected to be used for seed and feed are also deducted.

<sup>4</sup>Includes varying quantities shipped to non-contiguous territories.

for certain crops, and by the minimum carry-over of stocks at the end of the year. The net supplies anticipated on this basis for the next 12 months are shown in Table 2, with comparable data for earlier years.

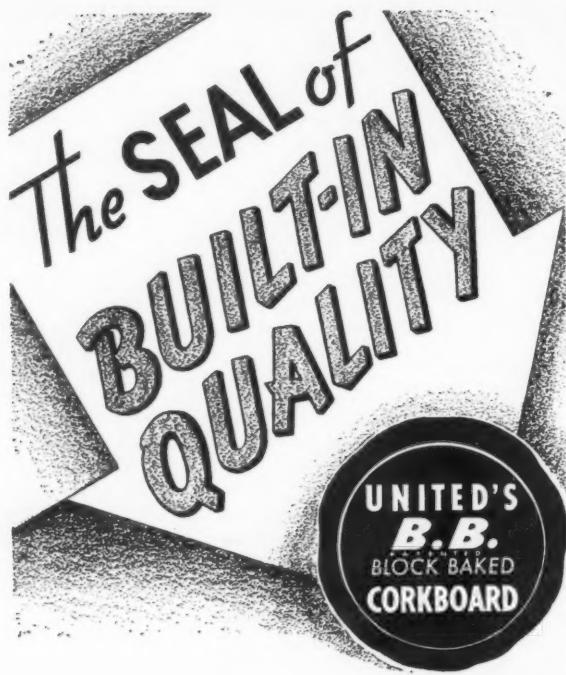
In order to compare current domestic consumption with the supplies used in previous periods, allowance must also be made for the growth of population, since increases in the number of consumers from year to year have raised the total food requirements of the nation. The estimates summarized in Table 2 have therefore been converted to a per capita basis in Table 3. The percentage changes in recent years from the average figures for 1925-29 are also shown.

## Per Capita Supplies Ample

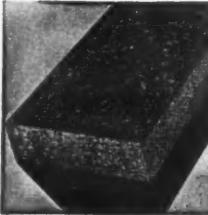
The quantities of food products available for domestic use in 1940-41, when expressed in per capita terms, are still found to be well in line with the amounts used in previous years. Per capita supplies of meat, poultry products, butter, and potatoes are estimated to be slightly below the 1925-29 average, but they are in general agreement with the figures for more recent years.

The per capita consumption of wheat will probably also be lower than in the earlier period, owing to changes in dietary habits over the last 10 or 15 years. For all other foods, the per capita supplies available for domestic use will probably be in excess of the base period figures.

Most of these increases, it should be noted, represent general trends in production and consumption during recent years, rather than unusually large crops for 1940-41; fruits and vegetables in particular have come to occupy a larger place in the diet, and dairy products also show an upward trend. A rapid increase in soybean acreage during the last few years is largely responsible for the rise in the supply of do-



OVER thirty years' experience in the manufacture of quality corkboard is behind each sheet of UNITED'S Insulation. This broad background of progress has been exemplified by the constant development of advanced principles of manufacturing methods such as the patented B. B. BLOCK BAKED CORKBOARD, a combination of internal and external heating which provides a thoroughly uniform baked corkboard, without charred surfaces or green centers. Such a high standard of quality and the successful service record of UNITED'S corkboard Insulation represent an attainment symbolized by an ever increasing number of installations, year after year.



## UNITED CORK COMPANIES KEARNY, NEW JERSEY

*Manufacturers and Erectors of Cork Insulation*

### SALES OFFICES AND WAREHOUSES

Albany, N. Y.  
Baltimore, Md.  
Boston, Mass.  
Buffalo, N. Y.  
Chicago, Ill.

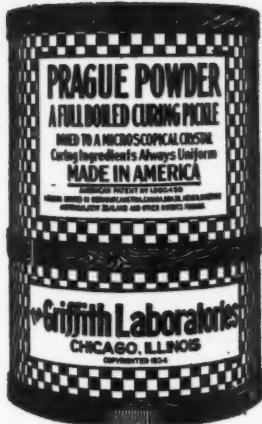
Cincinnati, Ohio  
Cleveland, Ohio  
Hartford, Conn.  
Indianapolis, Ind.  
Los Angeles, Calif.

Milwaukee, Wis.  
New Orleans, La.  
New York, N. Y.  
Philadelphia, Pa.  
Pittsburgh, Pa.  
Rock Island, Ill.  
St. Louis, Mo.  
Waterville, Me.

## PRAGUE POWDER

Registered U. S. Patent Nos.  
2054623, 2054624, 2054625, 2054626

### "AN ALL-PURPOSE CURE"



We are meat curing specialists.

We have many years of practical experience in packinghouse problems.

We have trained men in every department of packinghouse practice.

We have here the most effective working personnel and laboratory equipment in this or any other country.

We give guidance and practical help to the meat industry, and are constantly making mechanical improvements.

We offer freely our help to any packer seeking information or assistance; looking for improved operative practice or new products.

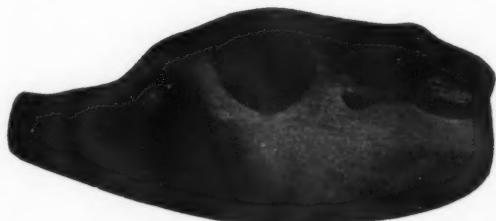
We are making PRAGUE POWDER and PRAGUE POWDER Pickle available in every part of the world, making the "Safe Fast Cure" possible.

We are striving for perfection. We can now guarantee the percentage of pickle in each individual ham.

We have invented the BEST Percentage Pickle Scale in America.

We build the Big Boy Artery Pickle Pump line, costing \$87.50 for the No. 7 to \$200.00 for the No. 4 and \$320.00 for the No. 3, and other sizes to suit your need.

### A PRAGUE CURED HAM SATISFIES



10% Curing Pickle added to green weight made this Smoked Ham.....100% out of Smokehouse.

### THE GRIFFITH LABORATORIES

1415-31 W. 37th Street, Chicago, Illinois

Eastern Factory: 35 Eighth St., Passaic, N. J.

Canadian Factory and Offices: 1 Industrial St., Leaside,  
Toronto 12, Ontario

mestic fats and oils, other than lard, shown in the table.

Total supplies of meat in the second half of 1940 will be larger than for any corresponding period since 1934, with pork accounting for most of the increase. Supplies during 1941 are expected to be somewhat smaller than in 1940, however, reflecting a decrease in the 1940 pig crop. For the coming 12 months the total supplies available will probably be as large as in 1939-40 and will exceed those of other recent years. On a per capita basis, the quantities of meat available for domestic consumption have recovered from the 1935 low of 116 lbs. and are almost as large as the 1925-29 average of 138 lbs.

The increased feed supplies available in 1937, 1938, and 1939 caused hog producers to expand production. However, the resulting increase in hog slaughter, with unfavorable conditions in the pork and lard export trade, have caused hog prices to decline to relatively low levels, and indications are that the number of pigs raised in 1940 will be at least 10 per cent fewer than in 1939. Most of this decrease will not be reflected in hog slaughter until 1941.

### Cattle Numbers Rising

Cattle slaughter and beef output have changed relatively little in the last three years, but cattle numbers have been gradually increasing. The increase may begin to be reflected in larger supplies of cattle for slaughter in 1941. The trend in beef output, therefore, is expected to be upward.

Yearly production of lamb and mutton has held relatively stable during the last five years and no material changes are indicated for the coming year. With some indications of a slight increase in the 1940 lamb crop, supplies for slaughter during the next 12 months will probably exceed those of a year earlier.

The United States export trade in meats now represents only a very small proportion of total domestic production. There appears to be little prospect that exports will increase materially during the coming year. Hence, most of the United States output will continue to be available for domestic use.

### Poultry and Dairy Foods

Supplies of both poultry and eggs are expected to be a little smaller in the 1940-41 season than in 1939-40. Total poultry supplies are expected to be about 6 per cent smaller while egg supplies may be about 2 per cent less than the figure for last year. Production of turkeys has been increasing rapidly since 1930. As a result of the large carry-over of turkeys, consumption in 1940-41 is expected to be only 3 per cent less than a year earlier.

Prospective supplies of butter and of dairy products other than butter for the year beginning July 1, 1940 are in line with the large supplies of recent seasons and much above the 1925-29 average. On a per capita basis, however, the estimated supply of butter

TABLE 3.—Summary of indicated per capita food supplies available for domestic consumption in 1940-41 and in previous years.<sup>1</sup>

Commodity	Average 1925-29	Per Capita Quantities				Maximum available 1940-41 <sup>2</sup>
		1937-38	1938-39	1939-40	Indicated 1940-41 <sup>3</sup>	
Meats other than poultry	137.7	124.3	125.7	136.7	136.7	138.5
Poultry meats	21.3	20.2	20.4	21.6	20.3	20.4
Eggs	40.8	39.1	38.6	38.7	37.7	38.0
Butter	17.4	16.6	17.6	17.5	17.1	17.2
Dairy products other than butter, in terms of whole milk	433.8	454.6	459.1	468.6	469.8	472.8
Lard	12.7	11.2	12.3	13.7	14.9	17.7
Other domestic edible fats and oils	15.8	20.5	17.3	18.1	18.5	19.5
Imported edible fats and oils	2.8	3.8	4.2	3.2	2.8	2.8
Wheat <sup>4</sup>	254.1	231.0	241.0	236.0	230.7	234.3
Rice	5.0	5.6	7.4	5.3	8.5	11.9
Fruits, fresh	115.4	140.3	137.4	139.5	148.9	153.4
Fruits, canned	13.0	19.7	20.5	22.6	22.7	23.8
Fruits, dried	5.3	5.7	5.8	6.8	6.1	8.5
Vegetables, fresh	85.0	95.6	98.5	99.3	101.4	101.4
Vegetables, canned	18.8	25.8	23.1	24.5	24.5	25.6
Potatoes	148.2	155.0	143.8	140.4	143.1	143.1
Sweet potatoes	23.4	26.3	26.6	25.2	23.7	23.7
Dry edible beans <sup>5</sup>	8.6	9.5	10.2	9.9	9.8	10.6

<sup>1</sup>In calculating the per capita consumption of the various classes of foods, no account was taken of the quantities which usually are lost or wasted in the marketing processes, and therefore, these data should not be assumed to represent actual per capita consumption. The population figures are the July 1 estimates of the Bureau of the Census through 1938 with unofficial estimates of the Bureau of Agricultural Economics for the later years.

<sup>2</sup>Per capita total supplies less estimated exports and probable carry-over into 1941-42. In the case of wheat, rice, potatoes, sweet potatoes and dry edible beans, the quantities expected to be used for seed and feed are also deducted.

<sup>3</sup>Per capita total supplies less a minimum carry-over into 1941-42, with no allowance for exports. In the case of wheat, rice, potatoes, sweet potatoes, and dry edible beans, the quantity expected to be used for seed and feed are also deducted.

<sup>4</sup>Includes varying quantities shipped to non-contiguous territories.

available for domestic consumption is about 1 per cent below the pre-depression average whereas estimated supplies of other dairy products are 9 per cent above the average.

Production of edible fats and oils in the United States in 1940-41 is expected to exceed all previous records. Soybean oil production probably will reach a new record peak, totaling possibly 700 million lbs. compared with an average of only 6 million lbs. for the five years 1925-29. The production of corn oil, peanut oil, and olive oil is also likely to be above average in the 1940-41 marketing year. Lard production, on the other hand, may be slightly less than the five-year average, and the production of cottonseed oil also will be below average.

The expected production of 4.7 billion lbs. of food fats other than butter would be at least 500 million lbs. in excess of usual consumption requirements. If, in addition, some 300 to 400 million lbs. of edible fats and oils are imported for food purposes (mainly from the Philippines and East Indies), a surplus of 800 to 900 million lbs. of food fats, chiefly in the form of lard and soybean oil (or soybeans), would be available for export or for increased domestic consumption, without depletion of reserve supplies.

Although ample surpluses of many foods will be available in this country during the coming year, it does not seem likely that the United States will be called upon to furnish large quantities of foodstuffs to Great Britain or to continental Europe. Nevertheless, the reported prospect of severe food shortages in some European nations has created considerable interest in the magnitude of the reserve supplies that could be made available for export, if need or opportunity should arise.

Table 4 shows the total quantities of pork and fats that could be spared without unduly curtailing the supplies available for domestic consumption.

At least 150 million bushels of wheat could be shipped to Europe, in addition to about 30 million bushels which may go to non-European countries. About 400 million bushels of corn and 100 million bushels of barley, or a total of 500 million bushels of feed grains, could also be shipped to Europe without placing any strain on the domestic supply situation.

At least 200 million lbs. of pork are available for export in 1940-41, and, since the outlet for United States pork in Canada is now largely cut off, from 150 to 175 million lbs. of this pork would be available for Great Britain if

(Continued on page 32.)

TABLE 4.—Quantities of pork and fats usually exported from the United States which are available for export in 1940-41, and actual exports in 1938-39

Commodity	Unit	Total quantities available for export <sup>1</sup>	Probable exports to non-European countries	Quantities available after allowing for exports to non-European countries	Total exports in 1938-39
Pork <sup>2</sup>	Mil. lbs.	400	50	350	172
Edible fats:					
Lard	Mil. lbs.	600-650	100-150	500	268
Other <sup>3</sup>	Mil. lbs.	250	—	250	-74 <sup>4</sup>
Total	Mil. lbs.	850-900	100-150	750	194

<sup>1</sup>Maximum exports which would not unduly curtail supplies available for domestic consumption and carry-over at the end of the crop year.

<sup>2</sup>Exportable as cured hams and shoulders or as American style bacon and possibly some as fresh pork.

<sup>3</sup>Excludes butter. Consists largely of soybeans (oil equivalent) or soybean oil; also includes some cottonseed oil and oleo oil.

<sup>4</sup>Net imports.

# *Up and down the* MEAT TRAIL

## Houston Packers See Beneficial Results in Institute Meat Drive

All Houston packers interviewed by THE NATIONAL PROVISIONER have expressed enthusiasm over the plan of the Institute of American Meat Packers to sponsor an intensive advertising campaign aimed at increasing meat consumption and popularity in the United States.

"We approve of the program," said Joe Heim, general manager of the Heim Packing Co. "Anything which will boost the sale of meat is bound to be all right."

The Turner Packing Co. also approves of the project. "We are for anything which will increase the consumption of meat," C. C. Call, manager, stated. "We think very highly of the work of the Institute, and we have heard many compliments on the excellent demonstrations they have sponsored."

M. Kaplan, Nelkin Packing Co., believes the program is bound to be beneficial, because advertising is the backbone of any type of promotional effort. "I believe that the campaign should be definitely slanted toward the virtues of meat as a health food, because of the beneficial results obtained when meat is used in the proper dietary way," Mr. Kaplan pointed out. "Meat is not fattening if used correctly, and this point should be stressed. A well-planned campaign should indeed prove very helpful."

Dixon Packing Co., Inc., came out whole-heartedly in favor of the program. "We are behind it and we are boosting it like the rest," said B. M. Wadsworth, vice president. "The idea is a sound one, and packers should reap some worth-while increases in sales as a result of it."

## Cook Packing Co. Erecting \$100,000 Addition to Plant

Construction of a \$100,000 addition to the Cook Packing Co., Scottsbluff, Neb., has been started to supplement the \$250,000 plant completed about two years ago. The new structure, to be located south and west of the main unit, will be one half as large as the present plant, and is to be constructed of concrete and bricks.

According to John Cook, president of the company, the new addition will be devoted to lamb killing and dressing and will have a capacity of 6,000 lambs a week. It will enable the firm to slaughter both lambs and cattle at one time, thereby increasing the plant's cattle output to about 600 head weekly. Lambs are now slaughtered on the cattle killing floor.

The addition will also include two coolers which will triple the plant's cooler capacity, and a truck loading dock 48 ft. long. A railroad spur track is being moved to provide room for the addition. The new unit will conform with present building design. It will be built by the Fullen Construction Co. of Scottsbluff.

## E. S. Hurd Establishes Chemical Research Firm

A new firm which will handle chemical and research problems for packers and canners has been established by



E. S. HURD

E. S. Hurd at Kew Gardens, N. Y. Mr. Hurd is well known in meat processing circles, having been associated with Stahl-Meyer, Inc. for the past 22 years as superintendent and director of research. He was recently awarded the 50-year gold service badge by the Institute of American Meat Packers. Mr. Hurd is a member

of the American Chemical Society, Institute of Food Technologists and the American Society for the Advancement of Science. Headquarters for the new firm will be located at 8309 Talbot st., Kew Gardens, N. Y.

## Morrell Veteran Retires; New Position is Created

After 45 years of continuous service with John Morrell & Co., P. R. Holloway, office manager of the Ottumwa general offices, will retire November 2, it was announced by T. Henry Foster, president. W. C. Mullin, now assistant office manager, has been appointed Ottumwa office manager, to fill the vacancy.

John F. Sells, now connected with Price, Waterhouse & Co., accountants of Chicago, has been appointed to the new position of general office manager in the Morrell organization, and will assume his new duties September 3. He will have supervision over all offices of the company at plants and branches.

Mr. Holloway was born in England and came to America in 1895. He entered Morrell service in the jobbing department, was transferred to the traffic department, and later was made cashier. After 13 years he was advanced to office manager. Mr. Mullin has been employed in the Ottumwa office since 1923, when he began in the branch house department.

Mr. Sells comes to Ottumwa after a 20-year stay in Chicago with Price, Waterhouse & Co. He was born near Calcutta, India, and studied electrical engineering at the University of Alberta and McGill University in Montreal. He became a chartered accountant in 1917 and was admitted to the bar in 1919. He joined the public accounting firm during 1920.



PROPOSED MORRELL MANUFACTURING BUILDING

Architect's drawing of the new manufacturing unit planned by John Morrell & Co. for erection east of the company's general offices at Ottumwa, Ia. Thirty thousand tons of glass bricks will go into the structure to provide natural lighting. It will be completed in time to handle 1941 business.

## Personalities and Events Of the Week

Thomas E. Wilson, chairman of the board, Wilson & Co., Chicago, was in New York last week and attended the funeral of E. A. Potter, a member of the board of directors, on August 23.

William M. Treadwell, managing editor of the *Associated Food Dealer* of Chicago for the past four and one-half years, has joined the executive staff of Roberts & Oake, Inc., Chicago. He will be in charge of sales, advertising, trade relations and sales promotion.

Harry I. Hoffman, president of J. S. Hoffman Co., Chicago, is spending a few days at the New York office of the company.

Albert H. Morrill, president of Kroger Grocery and Baking Corp., spoke before approximately 350 merchants of the Piggly Wiggly Operators association at their annual convention in Chicago.

Fire in the smokehouse of the Blakemore Bros. packing plant, Guymon, Okla., resulted in damage to a considerable amount of meat. The fire is reported to have started when smokehouse grease ignited.

Louis R. Baker, an employe of Swift & Company at Newark, N. J., died at his home in that city on August 25. He is survived by his widow and one daughter.

Tom Montgomery, a former officer of the Wickham Packing Co., Sapulpa, Okla., has purchased a half interest in the Paul Harris Packing Co., Seminole, Okla. It will be known as the Harris and Montgomery Packing Co.

Seventy members of the Shawnee county 4-H chick club were recently guests at a party given by Roy Jensen, manager of the Premium Packing Co., Topeka, Kans.

James E. Erwin, veteran Oklahoma City packer and founder of the Erwin Packing Co., died recently following an operation. Mr. Erwin, who entered the meat packing industry in that city in 1912, had been operating independently in recent years. He was 65 years old.

George B. Mulloy of Brady, McGillivray & Mulloy, packinghouse consulting engineers, is spending a three-week vacation in California.

Arrow Provisions, Inc., has taken over and will operate the packing plant formerly operated by the Decatur Ice & Coal and the Decatur Packing Co., Decatur, Ala.

Lester A. Mercier, veteran retired Portland, Me., provision dealer, died suddenly at his home on August 17. He was 80 years old.

Fire of unknown origin destroyed the slaughter house and packing plant of the Susanville Meat Co., Susanville, Cal., on August 9. Loss was estimated at \$75,000. The plant is owned by Frank V. Wood.

A two-story utility building is being built by the Neuhoff Packing Co., Nashville, Tenn., to provide larger dressing

rooms for employees, a new office for government inspectors, a first aid room and cafeteria. The building will cost approximately \$24,000, according to E. C. Tompkins, president.

Establishment of an abattoir zone to permit erection of a \$30,000 building is being sought by the Mayer Meat Co., operator of a packing plant at Middletown, O.

Armour and Company's branch at Olean, N. Y., recently celebrated its fortieth anniversary. Walter W. Murphy, who has been in charge of the local branch since 1903, also celebrated his forty-seventh year in the service of the company.

J. W. Dawson, manager of the Marion county stockyards at Hodgenville, Ky., has sold his half interest in the company to Virgil Sanders of Lebanon, Ky. He will continue as manager of the stockyards until a successor is appointed.

C. E. Burk, credit manager of the New York branch of the Rath Packing Co., is spending his vacation in Connecticut. Kenneth Cram, who has been with Rath for 10 years, starting at Waterloo, Ia., and more recently located at Dallas, Tex., has been transferred to New York as assistant credit manager.

B. M. Wadsworth, vice president of the Dixon Packing Co., Inc., Houston, Tex., enjoyed several weeks of Southern vacation travel which took him to the shores of Florida's Lake Okeechobee. Interesting points in Georgia, Alabama and Mississippi were also visited.

Chris J. Horn, prominent Omaha live-stock commission man, was fatally injured in an automobile accident near Daniel, Wyo., on August 26. At the time of his death, he was a member of the Omaha Live Stock Exchange and president and salesman of the Triangle Commission Co. of Omaha.

Promotion of Guy Roberts of the Sioux Falls plant of John Morrell &

Co., has been announced by company officials. Mr. Roberts, who has been secretary to J. M. Foster, general manager at Sioux Falls, is now in charge of advertising and publicity.

City inspection of their new smoked turkey has been requested by the Forst Packing Co. Inc., Kingston, N. Y. Federal meat inspectors who work regularly at the plant are not qualified to inspect fowl.

Jacob Herman of Milwaukee, Wis., has been named as the representative of the National Association of Retail Meat Dealers on the National Live Stock and Meat Board.

Appointment of H. P. Gangwer of Denver as branch manager at Salt Lake City, Utah, has been announced by Armour and Company. Mr. Gangwer succeeds Frank Bumgartner, who has been transferred to another post.

T. W. Bailey, general manager, Savory foods division, John Morrell & Co., Ottumwa, Ia., was a visitor in New York last week and spoke at the Eastern sales conference of the company, which was held at the Hotel Biltmore.

A. J. Lahr, retail sales manager, New York Butchers Dressed Meat Co., New York City, is spending his vacation in Maine fishing and hunting.

Eight new tanks have been added to the Swift & Company soybean plant at Des Moines, Ia. The tanks have a 240,000 bushel capacity, giving the plant a total storage capacity of 700,000 bushels. A. F. Leathers is manager.

J. S. Austin, assistant manager of the John Morrell & Co. branch at East Cambridge, was seriously injured recently as he was returning home from a vacation trip. Also injured were Mrs. Austin, her sister-in-law and daughter.

Clarence Kohn, vice president of Emil Kohn, Inc., well-known calfskin and by-products dealers of New York, visited recently in the Boston area.

### EASTWOOD TRIMS A FANCY STEAK

George A. Eastwood (right) president of Armour and Company, demonstrates his skill in trimming a fancy steak while Edwin F. Janssen, president of the St. Paul and Minnesota Retail Meat Dealers associations, looks on. Mr. Eastwood performed the demonstration in the kitchens of one of the hotels at St. Paul, Minn., where he spoke recently at the annual convention of the National Association of Retail Meat Dealers.



# Meat Going Up . . . WITH NEW **R & M HOIST**

Up goes the beef—moving fast, under perfect control—when the new R & M worm-drive hoist takes hold. It's ideal for knocking pen and dressing floor—designed and built by Robbins & Myers for the packing industry—and surprisingly low priced.

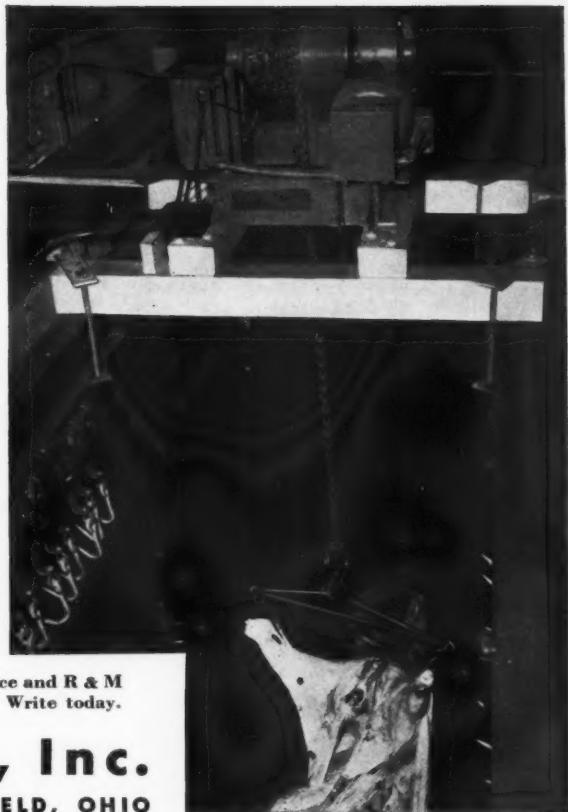
Over-sized drive with special bronze-cut gear and nickel steel ground worm, assures dependable performance. Steel channel base, steel-welded drum and drum bracket provide exceptional strength and wear resistance.

A flexible coupling connects the worm drive with the famous R & M enclosed ball bearing, high-torque hoist motor. The chain, made to stand toughest strain, has handy drop-forged swivel hook attached.

For easy, trouble-free manipulation there is a choice of gasketed push-button or heavy rope-operated drum-hoist controller—and an upper-limit switch that really works.

Let R & M experts analyze your hoisting problems. Their advice and R & M quality equipment may help you save thousands of dollars. Write today.

**ROBBINS & MYERS, Inc.**  
HOIST & CRANE DIVISION • SPRINGFIELD, OHIO



If you're after Ham Profits, better buy **ADELMANN**

**ADELMANN HAM BOILERS** are made of Cast Aluminum, Tinned Steel, Monel Metal, and Nirosa (Stainless) Steel. Adelmann Ham Boilers offer the most complete line available. Liberal trade-in schedules make it actually profitable to dispose of worn, obsolete equipment for new Adelmann Ham Boilers. Ask for booklet "The Modern Method" today.

"ADELMANN—  
The Kind Your  
Ham Makers  
Prefer."



The Adelmann Method of boiling hams insures results because of unusual exclusive features. It cooks the ham in its own juice. Flavor, texture, appearance and quality are greatly improved.

Elliptical yielding springs eliminate cover tilting and exert a firm, wide, flexible pressure. Perfectly shaped, evenly molded boiled hams are always produced.

Adelmann Ham Boilers are easiest to handle, quickest to operate, reduce shrinkage, and lower operation costs. They are simple to clean, last longer, perform better, produce the kind of boiled hams that really sell!

**HAM BOILER CORPORATION**

OFFICE and FACTORY, PORT CHESTER, N. Y. Chicago Office, 332 South Michigan Avenue

European Representatives: R. W. Bollans & Co., 6 Stanley St., Liverpool & 12 Bow Lane, London.

Australian and New Zealand Representatives: Gollin & Co., Pty. Ltd., Offices in Principal Cities.

Canadian Representative: C. A. Pemberton & Co., Ltd. Toronto, Ont.

# REFRIGERATION and Air Conditioning

## MEAT: PLANT REFRIGERATION

A Complete Course for  
Executives and Workers  
Prepared by—

The National Provisioner

### LESSON 74

#### Selecting Lubricating Oils

LUBRICATING oil transfers the friction and hence, the wear, from the bearing surfaces to the oil. This produces what is known as fluid friction, which is much less than the friction resulting from metal-to-metal contact. The amount of fluid friction depends on the grade and characteristics of the oil used. A thin lubricant produces less fluid friction than a heavy one. If the oil used is too heavy for a particular job, there will be excessive fluid friction and the bearing will heat.

Lack of lubrication or the use of a poor lubricant becomes evident immediately. Excessive wear, shutdowns, high power consumption, stuck valves, and congealed oil in the low side will follow the use of an unsuitable lubricant. Much grief can be avoided by selecting a lubricant which is suitable in all respects.

A good lubricant will not be squeezed out between the bearing surfaces by the pressure to which it is subjected and it will stick to the surfaces. An ice machine oil must not gum up and stick to the inside of pipes which are in contact with low temperature; it must remain fluid under all conditions.

#### Kinds of Lubricants

Lubricants are classified as solids, greases and oils. Graphite is a solid lubricant. Since fluid friction created within a grease is quite high, this type of lubricant is not suitable for high speeds, but is used in service where oil is not practical. Greases contain fillers which do not add to and, in some cases, reduce lubricating properties.

There are three kinds of lubricating oils. Those made from animal and vegetable stock are called fixed oils. They have excellent adhesive properties, but they oxidize and decompose readily and form solid deposits which clog lines and

orifices. They also become acid and corrode bearings.

Mineral oils are produced by distilling crude petroleum. Characteristics of a mineral oil will depend on the grade of petroleum from which it is made and the method of distillation used.

A compound oil is a combination of mineral and animal or vegetable oils. Compound oil is used for steam cylinder lubrication and is adhesive. It will form gummy deposits, mix with water and produce a sludge; for these reasons it is not customary to use more than 10 per cent of vegetable or animal oil. Oil to be recirculated should be 100 per cent mineral.

All petroleum crudes have a paraffinic, naphthenic or a mixed base. The first type of crude has a high wax content; the second is relatively free from wax. Mixed base crudes contain some wax. The need for a low pour point in compressor oils calls for use of those made from crudes containing no paraffin.

Paraffin-base crudes may be dewaxed by a solvent process which involves mixing the crude with a solvent to dissolve out the undesirable hydrocarbons. The oil may be treated further with sulphuric acid to bring about a chemical change. The degree of refining required to produce a satisfactory refrigeration oil may be appreciated when it is known

## 37 LESSONS Now Available IN PERMANENT FORM

The first 37 lessons in The National Provisioner's School of Refrigeration are now available in book form. The volume is indexed to permit ready reference to the many points on any subject covered in the articles. The edition is limited. The price is \$1.50. Order your copy now.

THE NATIONAL PROVISIONER  
407 So. Dearborn St., Chicago, Ill.

Enclosed is check or money order for \$1.50 for Volume 1, "Meat Plant Refrigeration."

Name \_\_\_\_\_

Street \_\_\_\_\_

City \_\_\_\_\_

that the yield of lubricant is only about 50 per cent. Oil is pumped slowly through a bed of fullers' earth to remove the last traces of soap and wax and to fix the color.

A lubricant for compressor cylinders should be of pure mineral oil and should

#### SAMPLE ANALYSES OF LUBRICATING OILS

	Compressor Oils	Low Temp.	Low Speed	Horizontal Comp.	High Speed Verticals
Gravity	27				24%
Fire	340	380			
Pour Test	30	450			
Viscosity @ 100° F.	50	—	—	—	—
Viscosity @ 210° F.	106	40%	48%	275	2%
Color	Light 2				
Conradson carbon	.010			.080	
Neutralisation No.	.015			.022	

	Engine and Auxiliary Oils	Engine Oil	Air Comp. Oil
Flash	370° F. min.	400° F. min.	
Pour	40° F. max.	40° F. max.	
Viscosity @ 100° F.	180-220 Sec. Saybolt	385-410 Sec. Saybolt	
Color N.P.A.	Not darker than 7	6	
S. E. No.	240 max.		
Carbon residue	.30% max.	.50% max.	
Neutralisation No.	.20 max.	.20 max.	

	Steam Cylinder Oil
Flash	480° F. min.
Pour	50° F. max.
Viscosity @ 100° F.	135-150 Sec. Saybolt
Carbon residue	.50% max.
Neutralisation No.	.20 max.

	Gasoline Motor Oil	
No. 20	No. 30	
A. P. I. Gravity	28.9	27.9
Open cup flash	420	435
Open cup fire	475	490
Pour point	0	Plus 5
Viscosity @ 100° F.	407	562
@ 130° F.	188	207
@ 210° F.	64	69
N. P. A. color	4½	5½
Carbon residue	.05%	.09%
Neutralisation No.	.15	.15

contain no impurities which might react with the ammonia. Unsaturated compounds form sludge. Compounds of animal, vegetable and fish oils are objectionable since they contain fatty acids which react to form soap. Physical properties of the oil should meet operating conditions of temperature, pressure, speed and the method of lubrication employed.

Ammonia does not support combustion so that the oil flash point need only be above the maximum compression temperature. Pour point requirements are determined by the lowest temperature in the expansion coils, where the oil should remain fluid and not congeal. Oil with the correct pour point may be drained from the low point of the system. The oil must be heavy enough to maintain a film on the friction surfaces, but should not be so heavy as to drag.

Bearing pressures are much higher than cylinder wall pressures. Therefore, two different grades of oil are usually

employed in open type compressors—one for bearing lubrication and the other for cylinder wall lubrication.

Viscosity is a measure of the resistance of a liquid to flow. It is proportional to temperature, so that tests for viscosity should be made, as nearly as possible, at the operating temperatures at which the oil will be used. The Saybolt viscosimeter is usually employed to test oil; in this instrument the oil, at a predetermined temperature, flows through a small calibrated glass tube. The number of seconds required for filling the measuring glass is the viscosity number.

Specific gravity is the ratio of the weight of oil at 60 degs. F., to the weight of an equal bulk of pure water. Specific gravity is determined with a hydrometer.

Flash and fire points are measures of the ability of the oil to resist heat. Oil, in which the bulb of a thermometer is inserted, is heated in an open container and a flame passed over the surface. When the vapor distilled from the surface flashes, the temperature of the oil is noted—this is the flash point. Heating is continued until the oil begins to burn; the temperature at which this occurs is the fire point. Flash and fire points of an oil cannot be exceeded under operating conditions without disastrous results.

The pour test measures the ability of an oil to remain fluid at low temperatures. The oil, in which a thermometer

is inserted, is chilled in a test tube partially submerged in a mixture of ice and salt. The test tube is removed from the chilling medium and placed at an angle so that the oil will flow out when warmed sufficiently. The temperature is noted as soon as the oil starts to flow. The thermometer reading is the pour point.

Acidity is expressed by a neutralization number. This number applies only to organic acids. It is the weight of alkali in milligrams, required to neutralize one gram of oil. The test is rather complex and beyond the scope of this discussion.

#### Compressor Lubrication

Cylinders of open type compressors are lubricated by pressure or gravity feed through ports in the cylinder walls. Oil ports are exposed to compression pressure and are provided with ball checks. Oil may accumulate on valves and cylinder surfaces and gum and cause valve trouble unless lubricant of the highest quality is used. Newer types of plate valves require little lubrication for proper functioning.

Lubrication of piston rods is of great importance since a cut rod invariably leaks. A correctly-designed stuffing box is very important; a gas chamber is provided where gases coming through the first packing are drawn back into the suction before they are vented to the air.

Engine oil should never be used to

lubricate compressor cylinders or piston rods since it is not made for these purposes. An ammonia compressor requires smaller quantities of oil than a steam cylinder because oil is not washed from the surface, except when liquid is drawn into the compressor.

Enclosed compressors are usually lubricated by splash from the crankcase, although force feed lubrication is sometimes employed. When both bearings and cylinders are lubricated with the same oil, the lubricant must be heavy enough to handle the bearings and of the proper quality for cylinder lubrication.

**EDITOR'S NOTE.**—When and how to overhaul an ammonia compressor will be discussed in Lesson 75.

#### PACKER PLANS STOCK CHANGE

Miller & Hart, Inc., Chicago, has asked stockholders' approval of a revised capital reorganization program providing for the exchange of each share of outstanding convertible preference stock, upon which there are dividend accumulations of over \$30 per share, for two shares of new preference and four shares of new common stock. Owners of outstanding common stock would receive one share of new common with a par of \$1 for each share of old common. The plan would extend maturity of the company's \$581,300 of debentures from 1943 to 1950.

### "BOSS" BALANCED-POWER COOKERS



These cookers may be furnished with motor, as shown in illustration, or may also be equipped with engine for plants in which exhaust steam is not available.

**LET US PROVE TO YOU THAT "BOSS" MEANS**

**BEST OF SATISFACTORY SERVICE**

**The Cincinnati Butchers' Supply Co.**

Gen. Office: 2145 Central Parkway  
Factory: 1972-2008 Central Ave., Cincinnati, Ohio  
824 Exchange Ave., U. S. Yards, Chicago, Ill.

### TUFEDGE Hits the Mark For Profit-Wise Packers!

"The Successor to Wasteful, Old-Fashioned Shrouds"



**THE CLEVELAND COTTON PRODUCTS CO.  
CLEVELAND, OHIO**



# Lard Exports Rise in July and Pork Shipments Decline

JULY lard exports of 28,238,574 lbs., were the largest for July in six years, according to a report from the U. S. Department of Commerce. This total was 122 per cent greater than the June volume at 12,696,718 lbs., and was about 3 million lbs. above the

total for July, 1939, at 25,338,962 lbs.

During the first seven months of this year, 148,448,570 lbs. of lard were exported, compared with 166,016,233 lbs. during the like period in 1939.

Exports of pork during July totaled 3,232,938 lbs., the smallest volume for

FOREIGN TRADE IN MEATS AND LARD				
	July, 1940 lbs.	July, 1939 lbs.	7 mos. 1940 lbs.	7 mos. 1939 lbs.
<b>IMPORTS</b>				
<b>Beef and Veal—</b>				
Beef, fresh	810,046	203,314	2,497,704	1,873,654
Veal, fresh	1,868	13,961	73,398	98,213
Beef and veal, pickled or cured	223,703	231,288	903,144	1,163,799
Beef, canned	4,069,696	8,081,615	42,145,191	49,085,984
Total beef and veal	5,105,313	8,330,178	45,619,437	51,721,050
<b>Pork—</b>				
Pork, fresh	155,971	194,665	1,359,483	1,371,722
Hams, shoulders and bacon	53,565	4,480,588	1,569,445	28,753,681
Pork, pickled, salted and other	12,662	188,892	571,174	1,743,112
Total pork	222,108	4,864,145	3,500,102	31,868,515
<b>EXPORTS</b>				
<b>Beef and Veal—</b>				
Beef and veal, fresh	547,141	338,411	4,404,533	2,876,482
Beef, cured	505,500	1,048,743	4,710,650	3,451,469
Beef, canned	23,356	137,702	557,725	1,045,284
Total beef and veal	1,075,997	1,524,856	9,672,908	7,373,235
<b>Pork—</b>				
Fresh and frozen	1,013,163	4,383,250	34,721,282	15,922,029
Cumberland and Wiltshire sides	5,60	310,918	5,030,024	2,157,575
Hams and shoulders	935,650	7,919,991	13,540,561	41,548,647
Bacon	232,667	1,672,609	7,404,165	5,775,004
Pickled	870,504	1,836,722	10,198,349	7,555,818
Canned	171,954	760,384	5,371,661	5,946,179
Total pork	3,232,938	16,883,883	76,066,042	78,905,252
<b>Lard</b>	28,238,574	25,338,962	148,448,570	166,016,233
<b>Sausage—</b>				
Sausage	245,514	241,950	1,802,799	1,708,090
Sausage ingredients	171,782	314,544	1,302,375	1,523,123

## CUT-OUT RESULTS FOR LIGHT HOGS AGAIN IN THE BLACK

The rise in hog and pork prices was reflected in hog cut-out results this week. Product values jumped 83¢ per cwt. on light weights, 73¢ on mediums and 62¢ on heavies, while hog costs rose only 46¢ per cwt. for light butchers, 50¢ on the mediums and 61¢ on the heavies. The light weights scored a profit, results on the medium weights improved, but the loss on heavy weights remained about the same as last week.

	Pet. live wt. lbs.	Price per cwt. alive	Value	Pet. live wt. lbs.	Price per cwt. alive	Value	Pet. live wt. lbs.	Price per cwt. alive	Value
<b>180-220 lbs.—</b>									
Regular hams	14.00	14.7	\$2.06	13.80	14.8	\$2.04	13.70	15.0	\$2.06
Picnics	5.60	11.0	.62	5.40	11.0	.59	5.30	10.6	.56
Boston butts	4.00	16.4	.66	4.00	14.8	.59	4.00	12.9	.52
Loins (blade in)	9.80	22.1	.27	9.60	20.7	.19	9.50	17.6	.17
Belies, S. P.	11.00	10.2	1.12	9.70	10.4	1.01	8.00	9.1	.73
Belies, D. S.	...	...	...	2.00	6.8	.14	4.00	6.6	.26
Fat backs	1.00	4.4	.04	3.00	4.8	.19	4.00	5.1	.14
Plates and jowls	2.50	4.0	.10	3.00	4.0	.12	3.40	4.0	.14
Raw leaf	2.10	4.8	.10	2.20	4.8	.11	2.00	4.8	.11
P. S. lard, rend. wt.	12.40	5.0	.62	11.00	5.0	.55	10.30	5.0	.52
Spare ribs	1.60	11.4	.18	1.50	7.8	.12	1.50	5.8	.09
Trimmings	3.00	8.2	.25	2.80	8.2	.23	2.80	8.2	.23
Feet, tails, neckbones	2.00	6.3	.03	2.00	...	.03	2.00	...	.03
Offal and miscellaneous	...	.21	...	...	...	.21	...	...	.21
TOTAL YIELD AND VALUE	69.00	...	\$8.16	70.00	...	\$7.92	70.50	...	\$7.33
Cost of hogs per cwt.		\$7.36			\$7.46				\$7.30
Condemnation losses		.04			.04				.04
Handling and overhead		.68			.59				.53
TOTAL COST PER CWT.		\$8.08			\$8.00				\$7.87
ALIVE									7.33
TOTAL VALUE		8.16			7.92				7.33
Loss per cwt.		...			.17				.54
Loss per hog		...			.39				1.38
Profit per cwt.		.16			...				...
Profit per hog		.32			...				...

July in six years, while exports of pork during July, 1939, totaled 16,883,883 lbs. Pork export shipments during the first seven months of 1940 totaled 76,066,042 lbs., against 78,905,252 lbs. during the corresponding period in 1939.

Pork imports, at 222,198 lbs., were the smallest for July since 1934. Imports for June, 1940, were 371,326 lbs. and for July, 1939, totaled 4,864,145 lbs. Seven months' imports of pork amounted to 3,500,102 lbs., compared with 31,868,515 lbs. during the corresponding period in 1939.

Beef and veal imports during July totaled 5,105,313 lbs. against 8,530,178 lbs. in July, 1939. Total for seven months at 45,619,437 lbs. compared with 51,721,050 lbs. during the first seven months in 1939.

## CANADIAN STORAGE STOCKS

Canadian storage stocks of pork, beef and lamb declined sharply during July compared with a month earlier. Stocks of pork decreased more than 12 million lbs. in July to total 53,656,000 lbs. on August 1 compared with 65,739,752 lbs. on July 1. Pork stocks on August 1, however, were more than 18 million lbs. above the five-year average and 23 million lbs. over holdings on August 1.

Beef stocks on August 1 amounted to 12,563,000 lbs., which was a decrease of about 1,500,000 lbs. from a month earlier, but was about 2,000,000 lbs. above the five-year average for the date. There was a little more veal in storage on August 1 than a month earlier.

Stocks of meat in Canada on August 1:

Aug. 1, * 1940	July 1, ** 1940	Aug. 1, 1939	5-yr. avg.
M lbs.	M lbs.	M lbs.	M lbs.
Beef ...	12,562,506	14,005,052	10,767,003
Veal ...	3,931,586	3,672,545	3,766,166
Pork ...	53,656,000	65,739,752	30,616,300
Butcher and ham, lbs.	30,000	45,200	232,900
Pork, lbs.	154,800	163,100	1,387,500
Canned meats, lbs.	3,839	585	17,094

\*Preliminary figures. \*\*Revised figures.

## CANADIAN EXPORTS TO U. S.

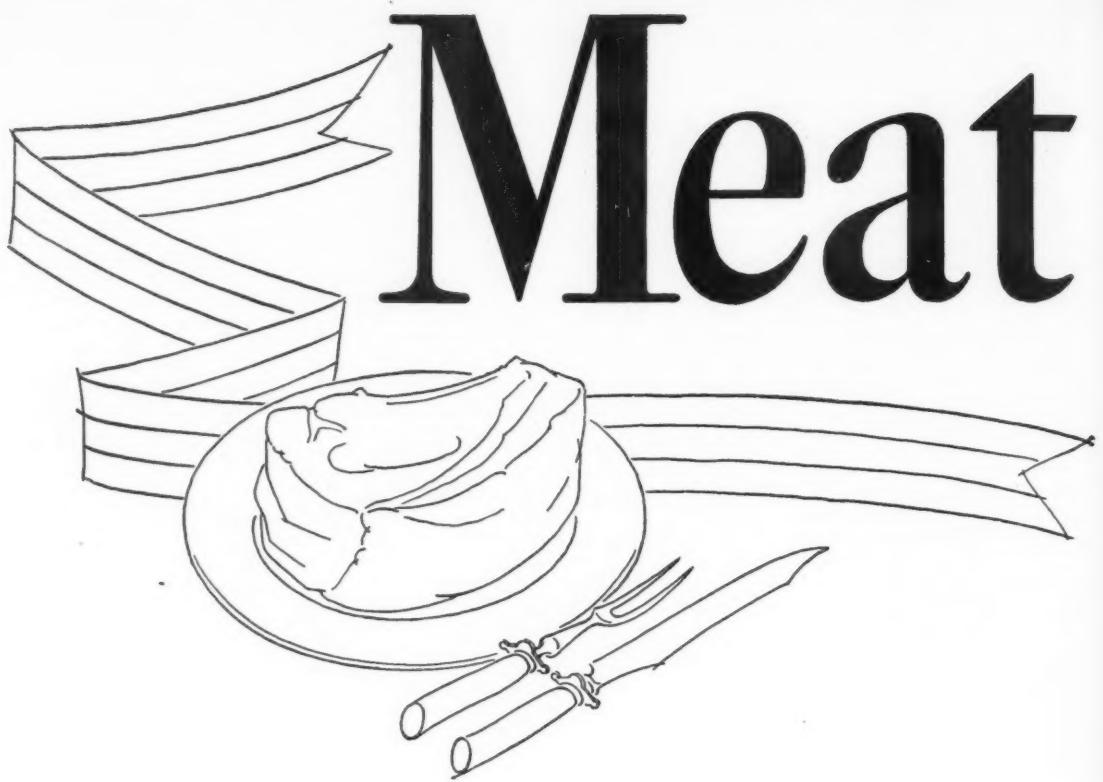
Exports of Canadian livestock and meats to the United States in July and the first seven months of 1940, compared with 1939:

July, 1940	July, 1939	7 mos. 1940	7 mos. 1939
Cattle, no. ...	8,136	27,418	74,583
Calves, no. ...	12,889	15,984	55,914
Hogs, no. ...	42	7	69
Sheep, no. ...	...	...	...
Beef, lbs. ...	69,600	88,100	273,300
Bacon and ham, lbs. ...	30,000	45,200	338,300
Pork, lbs. ...	154,800	163,100	1,387,500
Canned meats, lbs. ...	3,839	585	17,094

## MEAT IMPORTS AT NEW YORK

Imports for the period August 15 to August 21, inclusive, at New York:

Point of origin	Commodity	Amount, lbs.
Argentina—Canned corned beef	...	18,000
Canada—Smoked bacon	...	115
—Smoked back bacon	...	1,322
—Fresh frozen pork hams	...	21,847
—Fresh frozen pork shoulders	...	4,413
—Smoked bacon middle	...	44
Cuba—104 quarters fresh frozen beef	...	8,541
—1,522 quarters fresh chilled beef	...	232,845



by EDGAR A. GUEST



Edgar A. Guest

*I sing this glorious land of ours,  
Its motor cars and shows,  
Its little gardens, gay with flowers,  
Its phones and radios.  
Here your ambitious boy may be  
Our President if he's able,  
But what spells U. S. A. to me  
Is "meat upon the table!"*

(Excerpt from the first fall advertisement by the American meat industry)

# *on the table*

A great industry is moving into action . . .

MEAT, in all its strength and pride, is coming out to tell its story . . .

The meat industry of America is going direct to the People of America . . . United it stands behind one great idea: "*Meat on the Table*" more often . . .

Beginning this fall, America is going to see a lot about meat, hear a lot about meat, read a lot about meat—and America is going to eat more meat!

The little verse on the opposite page is taken from a longer poem by Edgar A. Guest.

His poem is the "centerpiece" of the first advertisement in the meat industry's advertising campaign. It is in full color. It covers two full pages. It will be seen in *Life Magazine*, September 27, and in *The Saturday Evening Post*, October 2. Leading newspapers, across the country, will also carry this message.

Immediately after "*Meat on the Table*" reaches the American consumer, other advertisements, plans and promotions will follow thick and fast.

Soon, you will have in your hands, or will have explained to you, the meat industry's efforts for the balance of 1940, in all its phases.

You will see what is to be done to make people glad they eat meat—

—what we are doing to take the veil off the marvelous health story of meat—its proteins, minerals and newly discovered vitamins

—how we propose to educate the woman into new uses and the new economies of meat through new and appetizing uses of the thrifty cuts

—how we plan to promote specific meat products at regular intervals

—how we plan to make the retail meat outlets of America blossom out with bright selling materials on meat.

In this magazine we will keep you posted on the progress of "*Meat on the Table*", and how to make it work for you.

AMERICAN MEAT INSTITUTE  
CHICAGO

# CHICAGO PROVISION MARKETS

## CASH PRICES

Based on actual carlot trading Thursday,  
August 29, 1940

### REGULAR HAMS

	Green	*S.P.
8-10	13½	14
10-12	13½	14
12-14	14½	14½
14-16	15	15½
10-16 range	14½	...

### BOILING HAMS

	Green	*S.P.
16-18	15½	15%
18-20	15½	15%
20-22	15½	15%
16-20 range	15½	...
16-22 range	15½	...

### SKINNED HAMS

	Green	*S.P.
10-12	16	16½
12-14	17	17½
14-16	17	17½
16-18	16½	16½
18-20	15½	15½
20-22	13½	14½
22-24	13½	13½
24-26	12½	13
25-30	11½	12
25 up, No. 2's inc.	11½	...

### PICNICS

	Green	*S.P.
4-6	11½	11½
6-8	11½	11½
8-10	10½	10½
10-12	10	10½
12-14	10	10½
8 up, No. 2's inc.	10	...

Short shank ¾@½c over.

### BELLIES

	(Square cut seedless)	Green	*S.P.
6-8	10½	11½	8
8-10	10%	11½	8
10-12	10%	11½	8
12-14	10%	11½	8
14-16	9½@10	11	8
16-18	9	10	8

\*Quotations represent No. 1 new cure.

### GREEN AMERICAN BELLIES

	8	7½
20-25	7½	7½

### D. S. BELLIES

	Clear	Rib
16-18	7½	...
18-20	7½	...
20-25	7½@7½	7½
25-30	7½	7½
30-35	7½	7½
35-40	7	7
40-50	6½	6½

### D. S. FAT BACKS

	5½	5½	6	6½
8-10	6½	6½	6	6½
10-12	6½	6½	6	6½
12-14	6½	6½	6	6½
14-16	6½	6½	6	6½
16-18	6½	6½	6	6½
18-20	6½	6½	6	6½
20-25	6½	6½	6	6½

### OTHER D. S. MEATS

	6-8	6	5	4½
Regular plates	6-8	6	5	4½
Clear plates	4-6	5	4½	4½
D. S. jowl butts				4½
S. P. jowls				4½
Green square jowls	5½	5½	5	4½
Green rough jowls	4½	4½	4½	4½

## WEEK'S LARD PRICES

Prices of cash, loose and leaf lard on the Chicago Board of Trade:

	Cash	Loose	Leaf
Saturday, Aug. 24	4.75n	4.87½	4.87½
Monday, Aug. 26	4.82½	4.95	5.00n
Tuesday, Aug. 27	4.90n	5.00	5.12½
Wednesday, Aug. 28	5.00n	5.05n	5.25n
Thursday, Aug. 29	5.00n	5.06n	5.25
Friday, Aug. 30	5.02½	5.05	5.25n

### Packers' Wholesale Prices

	Refined lard, tierces, f.o.b. Chgo.	7
Kettle rend., tierces, f.o.b. Chgo.		8
Leaf, kettle rend., tierces, f.o.b. Chgo.		8
Neutral, tierces, f.o.b. Chicago	7½	7½
Shortening, tierces, c.a.f.	9½	9½

### Havana, Cuba Lard Price

Wednesday, August 28, 1940

Pure lard ..... 10.25

## FUTURE PRICES

### SATURDAY, AUGUST 24, 1940

	Open	High	Low	Close
LARD—				
Sept. ....	4.67½	4.70	4.67½	4.70
Oct. ....	4.80	4.80	4.80	4.80
Dec. ....	5.02½	5.02½	5.00	5.02½
Jan. ....	5.12½	5.12½	5.12½	5.12½
Mar. ....	5.20	5.20	5.20	5.20
May. ....	5.17½	5.17½	5.17½	5.17½
Sales: Sept. 16; Oct. 5; Dec. 13; Jan. 7; May. 1; total, 44 sales.				
Open interest: Sept. 683; Oct. 865; Dec. 733; Jan. 357; Mar. 19; May. 50; total, 2,707 lots.				

### MONDAY, AUGUST 26, 1940

	Open	High	Low	Close
LARD—				
Sept. ....	4.67½	4.77½	4.67½	4.77½
Oct. ....	4.80	4.90	4.80	4.90
Dec. ....	5.00	5.12½	5.00	5.12½
Jan. ....	5.20	5.20	5.20	5.20
Mar. ....	5.27½	5.27½	5.27½	5.27½
May. ....	6.25	6.25	6.25	6.25
Sales: Sept. 49; Oct. 15; Dec. 37; Jan. 22; May. 3; total, 126 sales.				
Open interest: Sept. 636; Oct. 867; Dec. 759; Jan. 376; Mar. 19; May. 52; total, 2,709 lots.				

### TUESDAY, AUGUST 27, 1940

	Open	High	Low	Close
LARD—				
Sept. ....	4.75	4.80	4.75	4.77½
Oct. ....	4.90	4.95	4.90	4.95
Dec. ....	5.10	5.15	5.07½	5.12½
Jan. ....	5.30	5.40	5.27½	5.37½
Mar. ....	5.30	5.40	5.27½	5.37½
May. ....	6.30	6.37½	6.30	6.37½
Sales: Sept. 90; Oct. 40; Dec. 59; Jan. 48; May. 13; total, 209 sales.				
Open interest: Sept. 562; Oct. 868; Dec. 790; Jan. 419; Mar. 19; May. 63; total, 2,721 lots.				

### CLEAR BELLIES—

	Sept. ....	Oct. ....
Sept. ....	7.25	7.35
Oct. ....	7.30	7.20
Sept. ....	7.25	7.25
Oct. ....	7.30	7.20

### WEDNESDAY, AUGUST 28, 1940

	Sept. ....	Oct. ....
LARD—		
Sept. ....	4.82½	4.92½
Oct. ....	4.95	5.02½
Dec. ....	5.17½	5.27½
Jan. ....	5.30	5.40
Mar. ....	5.37½	5.37½
May. ....	6.30	6.37½
Sales: Sept. 76; Oct. 9; Dec. 59; Jan. 48; May. 1; total, 197 sales.		
Open interest: Sept. 488; Oct. 862; Dec. 830; Jan. 464; Mar. 19; May. 64; total, 2,727 lots.		

### CLEAR BELLIES—

	Sept. ....	Oct. ....
Sept. ....	7.25	7.30
Oct. ....	7.30	7.25
Sept. ....	7.25	7.25
Oct. ....	7.30	7.25

### THURSDAY, AUGUST 29, 1940

	Sept. ....	Oct. ....
LARD—		
Sept. ....	4.92½	4.92½
Oct. ....	5.05	5.05
Dec. ....	5.25	5.25
Jan. ....	5.40	5.40
Mar. ....	5.30	5.30
May. ....	6.15	6.15
Sales: Sept. 40; Oct. 11; Dec. 26; Jan. 48; Mar. 4; May. 10; total 139 sales.		
Open interest: Sept. 461; Oct. 866; Dec. 849; Jan. 503; Mar. 23; May. 73; total 2,775 lots.		

### CLEAR BELLIES—

	Sept. ....	Oct. ....
Sept. ....	7.25	7.30
Oct. ....	7.30	7.25
Sept. ....	7.25	7.25
Oct. ....	7.30	7.25

### FRIDAY, AUGUST 30, 1940

	Sept. ....	Oct. ....
LARD—		
Sept. ....	4.85	4.85
Oct. ....	5.07½	5.07½
Dec. ....	5.17½	5.27½
Jan. ....	5.40	5.40
Mar. ....	5.25	5.25
May. ....	6.20	6.07½
Sales: Sept. 47; Oct. 11; Dec. 26; Jan. 48; Mar. 4; May. 10; total 139 sales.		
Open interest: Sept. 468; Oct. 862; Dec. 849; Jan. 503; Mar. 23; May. 73; total 2,775 lots.		

### CLEAR BELLIES—

	Sept. ....	Oct. ....

<tbl

# MEAT AND SUPPLIES PRICES

## Chicago

### WHOLESALE FRESH MEATS

#### Carcass Beef

	Week ended August 28, 1940	Cor. week, per lb.
Prime native steers—		
400-600	20½	15½ @ 16½
600-800	20½	15½ @ 16½
800-1000	20½	15½ @ 16
Good native steers—		
400-600	19½ @ 20	15 @ 16
600-800	19½	14½ @ 15½
800-1000	19½ @ 19½	14 @ 15
Medium steers—		
400-600	19½	14½ @ 15
600-800	19	14½ @ 15
800-1000	18½	14½ @ 15
Heifers, good, 400-600	19	14 @ 15
Cows, 400-600	12½ @ 14	11 @ 13
Hind quarters, choice	25	19 @ 20
Fore quarters, choice	15%	11½ @ 12

#### Beef Cuts

Steer loins, prime.....	unquoted	
Steer loins, No. 1.....	37	29
Steer loins, No. 2.....	35	25
Steer short loins, prime.....	unquoted	
Steer short loins, No. 1.....	43	27
Steer short loins, No. 2.....	39	26
Steer loin ends (hips).....	33½	25
Steer loin ends, No. 2.....	33	16
Cow loins.....	22	18
Cow short loins.....	23	15
Cow loin ends (hips).....	21	15
Steer ribs, prime.....	unquoted	
Steer ribs, No. 1.....	25	17
Steer ribs, No. 2.....	23	16
Cow ribs, No. 2.....	13½	11½
Cow ribs, No. 3.....	13	11
Steer rounds, prime.....	unquoted	
Steer rounds, No. 1.....	21½	16½
Steer rounds, No. 2.....	21	16
Steer chuck, prime.....	unquoted	
Steer chuck, No. 1.....	16½	12
Steer chuck, No. 2.....	16	11½
Cow chuck.....	17	12½
Cow chuck.....	14	11
Steer plates.....	9½	8
Medium plates.....	9½	7½
Briskets, No. 1.....	14	12
Cow navel ends.....	8½	5½
Cow navel ends.....	8½	7½
Fore shanks.....	9½	6
Hind shanks.....	9½	5½
Strip loins, No. 2 bms.....	60	50
Strip loins, No. 2.....	50	45
Sirloin butts, No. 1.....	42	31
Sirloin butts, No. 2.....	26	22
Beef tenderloins, No. 1.....	68	55
Beef tenderloins, No. 2.....	65	45
Rump butts.....	16	14
Flank steaks.....	26	21
Shoulder clods.....	17	14½
Hanging tenderloins.....	15	17
Insides, green, 6@8 lbs.....	21	16
Outsides, green, 5@6 lbs.....	19	14½
Knuckles, green, 5@6 lbs.....	20	15

#### Beef Products

Brains.....	6	6
Hearts.....	9	10
Tongues.....	18	18
Sweetbreads.....	14	17
Ox tails.....	8	7
Fresh tripe, plain.....	10	10
Fresh tripe, H. C.....	11½	11½
Livers.....	19	20
Kidneys.....	9	11

#### Veal

Choice carcass.....	20	17 @ 18
Good carcass.....	17 @ 19	15 @ 17
Good saddles.....	24	21 @ 22
Good racks.....	15	14
Medium racks.....	13	11

#### Veal Products

Brains, each.....	8	7
Sweetbreads.....	30	30
Calf livers.....	50	32

#### Lamb

Choice lambs.....	22	18
Medium lambs.....	20	16
Choice saddles.....	24	22
Medium saddles.....	21	20
Choice fores.....	18	14
Medium fores.....	16	13
Lamb fries.....	28	32
Lamb tongues.....	17	17
Lamb kidneys.....	15	15

#### Mutton

Heavy sheep.....	6	5
Light sheep.....	8	7
Heavy saddles.....	10	6
Light saddles.....	10	9
Heavy fores.....	5	4
Light fores.....	6	5
Mutton legs.....	12	9
Mutton loins.....	8	8
Mutton stew.....	4	4½
Sheep tongues.....	11	11½
Sheep heads, each.....	11	11

### Fresh Pork and Pork Products

Pork loins, 8-10 lbs. av.....	24	23
Picnics.....	12½	13
Skinned shoulders.....	14	13
Tenderloins.....	32	32
Spare ribs.....	14	12
Back fat.....	7½	7
Bacon butts, cellar trim, 2@4	17	16
Hocks.....	8	8
Tails.....	5	7
Neck bones.....	3	3½
Slip bones.....	7	11
Blade bones.....	9	11
Pigs' feet.....	2½	4
Kidneys, per lb.....	4	9
Livers.....	8	8
Brains.....	7	8½
Ears.....	4	4
Snouts.....	5	5
Hends.....	6	8
Chitterlings.....	5	6½

### WHOLESALE SMOKED MEATS

Fancy regular hams, 14@16 lbs., parchment paper.....	17% @ 18%
Fancy skinned hams, 14@16 lbs., parchment paper.....	19½ @ 20½
Standard reg. hams, 14@16 lbs., plain.....	16½ @ 17½
Picnics, 4@8 lbs., short shank, plain.....	15 @ 16
Picnics, 4@8 lbs., long shank, plain.....	13 @ 14
Fancy bacon, 6@8 lbs., plain.....	17½ @ 18
Standard ham, 6@8 lbs., plain.....	14 @ 15
No. 1 ham sets, smoked.....	
Inside, 8@12 lbs.....	37 @ 38
Outsides, 5@9 lbs.....	34 @ 35
Knuckles, 5@9 lbs.....	8 @ 11
Cooked hams, choice, skin on, fatted.....	30
Cooked hams, choice, skinless, fatted.....	34
Cooked picnics, skin on, fatted.....	24%
Cooked picnics, skinned, fatted.....	25½

### VINEGAR PICKLED PRODUCTS

Pork feet, 200-lb. bbl.....	\$15.75
Lamb tongue, short cut, 200-lb. bbl.....	65.00
Regular tripe, 200-lb. bbl.....	17.25
Honeycomb tripe, 200-lb. bbl.....	22.25
Pocket honeycomb tripe, 200-lb. bbl.....	26.00

### BARRELLED PORK AND BEEF

Clear fat back pork:	
70-80 pieces.....	\$12.50
80-100 pieces.....	12.00
100-125 pieces.....	11.50
Clear plate pork, 25-35 pieces.....	12.00
Beef pork.....	12.00
Brisket pork.....	17.00
Plate beef.....	17.00
Extra plate beef.....	18.00

### SAUSAGE MATERIALS

(Packed basis.)	
Regular pork trimmings.....	9 @ 9½
Special lean pork trimmings 85%.....	13½ @ 14
Extra lean pork trimmings 95%.....	
Pork cheek meat (trimmed).....	11½
Pork hearts.....	7½
Pork livers.....	5½
Native boneless beef meat (heavy).....	15½ @ 15½
Boneless chuck.....	12 @ 13
Shank meat.....	13½
Beef trimmings.....	11 @ 12
Beef cheeks (trimmed).....	9
Dressed canners 350 lbs. and up.....	10 @ 10½
Dressed canner cows, 400-450-lb. Dr. bologna bulls 600 lbs. and up.....	10½
Smoked liver sausage in hog bungs.....	11½
Head cheese.....	14½
New England luncheon specialty.....	21
Minced luncheon specialty, choice.....	19½
Tongue & blood.....	17
Blood sausage.....	17
Souce.....	16
Polish sausage.....	22

### DRY SAUSAGE

Cervelat, choice, in hog bungs.....	.36
Thuringer.....	.20
Farmer.....	.28
Holsteiner.....	.28
B. C. salami, choice.....	.33
Milano, salami, choice in hog bungs.....	.31
B. C. salami, new condition.....	.18½
Frisées, choice, in hog middles.....	.31
Genon style salami, choice.....	.38
Pepperoni.....	.29
Mortadella, new conditions.....	.19½
Capicola.....	.39
Italian style hams.....	.30
Virginia hams.....	.37

### CURING MATERIALS

Nitrite of soda (Chgo. w/hae stock). In 425-lb. bbls., delivered.....	\$ 8.75
Saltpetre, less than ton lots f.o.b. N. Y.: Dbl. rfd. granulated.....	7.50
Small crystals.....	8.50
Medium crystals.....	8.75
Large crystals.....	9.50
Dbl. rfd. gran. nitrate of soda.....	3.75
Salt, per ton, in minimum car of 80,000 lbs. only, f.o.b. Chicago, per ton:	
Granulated.....	7.20
Medium, dried.....	10.20
Rock.....	6.80
Sugar—	
Raw, 96 basis, f.o.b. New Orleans.....	2.73
Standard gran., f.o.b. refiners (2%).....	4.30
Packers' curing sugar, 250 lb. bags, f.o.b. Reserve, La., less 2%.....	4.10
Dextrose, in car lots, per cwt. (Cotton).....	3.64
In paper bags.....	3.59

### SAUSAGE CASINGS

(F. O. B. Chicago.) (Prices quoted to manufacturers of sausage.)

Beef casings:	
Domestic rounds, 180 pack.....	.16
Domestic rounds, 140 pack.....	.31
Export rounds, wide.....	.37
Export rounds, medium.....	.31
Export rounds, narrow.....	.32
No. 1 weasands.....	.06
No. 2 weasands.....	.04
No. 1 bungs.....	.12
No. 2 bungs.....	.08
Middles, regular.....	.45
Middles, select, wide, 2@2½ in. ....	.45
Middles, select, extra, 2½ in. in. & up.....	.70
Dried bladders	
12-15 in. wide, flat.....	.90
10-12 in. wide, flat.....	.75
8½ in. wide, flat.....	.35
6-8 in. wide, flat.....	.25
Pork casings:	
Narrow, per 100 yds.....	1.75
Narrow, special, per 100 yds.....	1.50
Medium, regular.....	1.15
English, medium.....	1.00
Wide, per 100 yds.....	.85
Extra wide, per 100 yds.....	.65
Export bungs.....	.16
Large prime bungs.....	.13
Medium prime bungs.....	.06
Small prime bungs.....	.03½
Middle, per set.....	.14

### SPICES

(Basis Chicago, original bbls., bags or bales.)	
Allspice, prime.....	17½ 19½
Resifted.....	10 21
Chili pepper.....	23
Powdered.....	23
Cloves, Amboyna.....	28 33
Zanzibar.....	18 21½
Ginger, Jamaica.....	13½ 18
African.....	8 11
Mace, Fancy Banda.....	.62 69
East India.....	.56 63
East & West India Blend.....	.58 63
Mustard flour, fancy.....	.25 21
No. 1.....	.19 24
Nutmeg, fancy Banda.....	.21 24
East India.....	.18½ 23
East & West India Blend.....	.17 20
Pepper, Spanish.....	.40 50
Pepper, French.....	.40 50
Pepper, Black.....	.94 13½
Black, Lambar.....	.94 13½
Black, Lampang.....	.54 7½
Black, White Singapore.....	.94 12½
Muntok.....	.94 13
Packers'.....	.12 16

(Continued on page 28.)

### PURE VINEGARS

</

# MARKET PRICES

## New York

### DRESSED BEEF

City Dressed	
Choice, native, heavy.	21 @ 22
Choice, native, light.	21 @ 22
Native, common to fair.	19 @ 20

### Western Dressed Beef

Native steers, 600@800 lbs.	18 @ 19
Native choice yearlings, 440@600 lbs.	17 @ 18
Good to choice heifers.	16 @ 17
Good to choice cows.	14 @ 15
Common to fair cows.	13 @ 14
Fresh bologna bulls.	13 @ 14

### BEEF CUTS

	Western	City
No. 1 ribs.	23 @ 24	22 @ 24
No. 2 ribs.	20 @ 21	21 @ 22
No. 3 ribs.	19 @ 20	18 @ 20
No. 1 loins.	32 @ 33	36 @ 40
No. 2 loins.	26 @ 28	30 @ 35
No. 3 loins.	20 @ 24	25 @ 29
No. 1 binds and ribs.	20 @ 21	21 @ 24
No. 2 binds and ribs.	18 @ 19	19 @ 21
No. 1 rounds.	17 @ 17	16 @ 17
No. 2 rounds.	16 @ 16	15 @ 15
No. 3 rounds.	15 @ 15	15 @ 15
No. 1 chuck.	15 @ 15	15 @ 15
No. 2 chuck.	14 @ 14	14 @ 14
No. 3 chuck.	13 @ 13	13 @ 13
City dressed bolognas.	13 1/2 @ 14 1/2	
Rolls, reg. 4@6 lbs. av.	18 @ 20	
Rolls, reg. 6@8 lbs. av.	20 @ 25	
Tenderloins, 4@6 lbs. av.	50 @ 60	
Tenderloins, 5@6 lbs. av.	50 @ 60	
Shoulder clods	16 @ 18	

### DRESSED VEAL

Good.	19 @ 20
Medium.	18 @ 19
Common.	17 @ 18

### DRESSED SHEEP AND LAMBS

Genuine spring lambs, good.	23 @ 24
Genuine spring lambs, good to medium.	22 @ 23
Genuine spring lambs, medium.	21 @ 22
Sheep, good.	9 @ 11
Sheep, medium.	8 @ 9

### DRESSED HOGS

Hogs, good and choice (110-140 lbs.)	
head on; leaf fat in.	\$11.25 @ \$11.75
Pigs, small lots (60-110 lbs.)	
head on; leaf fat in.	12.00 @ \$12.50

### FRESH PORK CUTS

Pork loins, fresh, Western 10@12 lbs. av.	24 @ 25
Shoulders, Western, 10@12 lbs. av.	14 @ 14 1/2
Butts, regular, Western.	17 @ 17 1/2
Hams, Western, fresh, 10@12 lbs. av.	16 @ 17
Picnics, Western, fresh, 6@8 lbs. av.	12 @ 13
Pork trimmings, extra lean.	18 @ 19
Pork trimmings, regular, 50% lean.	11 @ 12
Spareribs.	10 @ 11

### COOKED HAMS

Cooked hams, choice, skin on, fatted.	57
Cooked hams, choice, skinless, fatted.	39

### SMOKED MEATS

Regular hams, 8@10 lbs. av.	19 @ 19 1/2
Regular hams, 10@12 lbs. av.	19 @ 19 1/2
Regular hams, 12@14 lbs. av.	19 @ 19 1/2
Skinned hams, 10@12 lbs. av.	20 1/2 @ 21 1/2
Skinned hams, 12@14 lbs. av.	20 1/2 @ 21 1/2
Skinned hams, 16@21 lbs. av.	19 1/2 @ 20 1/2
Skinned hams, 18@20 lbs. av.	19 @ 20
Picnics, 4@6 lbs. av.	15 @ 16
Picnics, 6@8 lbs. av.	14 1/2 @ 15
Bacon, boneless, Western.	18 @ 19
Bacon, boneless, city.	17 @ 18
Beef tongue, light.	22 @ 23
Beef tongue, heavy.	23 @ 24

### FANCY MEATS

Fresh steer tongues, untrimmed.	16c a pound
Fresh steer tongues, 1 c. trimmed.	28c a pound
Sweetbreads, beef.	30c a pound
Sweetbreads, veal.	70c a pair
Beef kidneys.	12c a pound
Mutton kidneys.	4c each
Livers, beef.	29c a pound
Oxtails.	14c a pound
Beef hanging tenders.	30c a pound
Lamb frens.	12c a pair

### BUTCHERS' FAT

Shop Fat.	.50 per cwt.
Breast Fat.	1.00 per cwt.
Edible Suet.	2.00 per cwt.
Inedible Suet.	1.50 per cwt.

### GREEN CALFSKINS

5-9 1/2-12 1/2 12 1/2-14 14-18 18 up	
Prime No. 1 veals, 18	2.15 2.55 2.60 3.15
Prime No. 2 veals, 11	1.85 2.25 2.30 2.75
Buttermilk No. 1, 8	1.65 2.05 2.10 ...
Buttermilk No. 2, 7	1.50 1.90 1.95 ...
Branded gruby...	.75 1.10 1.15 1.85
Number 3.....	.75 1.10 1.15 1.85

### WHOLESALE DRESSED MEAT PRICES

Wholesale prices of Western dressed meats, quoted by the U. S. Department of Agriculture, Agricultural Marketing Service, on August 28, 1940:

Fresh Beef:	CHICAGO	BOSTON	NEW YORK	PHILA.
STEER, Choice:				
400-500 lbs. <sup>1</sup>	\$18.50 @ 20.00			
500-600 lbs.	18.50 @ 20.00			
600-700 lbs. <sup>2</sup>	19.50 @ 20.50	\$20.50 @ 22.00	21.00 @ 22.00	\$21.00 @ 22.00
700-800 lbs. <sup>2</sup>	19.50 @ 20.50	20.50 @ 22.00	21.00 @ 22.00	\$21.00 @ 22.00
STEER, Good:				
400-500 lbs. <sup>1</sup>	18.00 @ 19.00			
500-600 lbs.	18.00 @ 19.00			
600-700 lbs. <sup>2</sup>	18.50 @ 19.50	17.50 @ 20.50	17.00 @ 19.50	17.50 @ 19.50
700-800 lbs. <sup>2</sup>	18.50 @ 19.50	17.50 @ 20.50	17.00 @ 19.50	17.50 @ 19.50
STEER, Commercial:				
400-600 lbs. <sup>1</sup>	15.50 @ 18.00			
600-700 lbs. <sup>2</sup>	15.50 @ 18.50	17.50 @ 19.50	17.00 @ 19.50	17.50 @ 19.50
STEER, Utility:				
400-600 lbs. <sup>1</sup>	13.50 @ 15.50			
COW (all weights):				
Commercial:				
80-120 lbs.	13.50 @ 15.00	15.50 @ 16.50	15.00 @ 17.00	
130-170 lbs.	16.00 @ 18.00			
VEAL, Choice:				
80-120 lbs.	18.50 @ 20.00	19.50 @ 21.00	20.00 @ 21.00	19.00 @ 20.00
130-170 lbs.				
VEAL, Good:				
50-80 lbs.	16.00 @ 17.50	17.50 @ 19.50	17.50 @ 19.00	18.00 @ 19.00
80-120 lbs.	16.50 @ 18.50	18.00 @ 19.50	18.00 @ 19.50	18.00 @ 19.00
130-170 lbs.	14.50 @ 16.00			
VEAL, Medium:				
50-80 lbs.	15.00 @ 16.00	16.50 @ 17.50	16.00 @ 17.00	16.00 @ 18.00
80-120 lbs.	15.50 @ 16.50	16.50 @ 18.00	16.50 @ 17.50	16.00 @ 18.00
130-170 lbs.	13.50 @ 14.50			
VEAL, Common:				
All weights	14.00 @ 15.00	15.00 @ 16.50	14.00 @ 16.00	16.00 @ 16.00
Fresh Lamb and Mutton:				
SPRING LAMB:				
LAMB, Choice:				
30-40 lbs.	21.00 @ 22.00	23.00 @ 24.50	23.50 @ 25.00	23.00 @ 24.00
40-45 lbs.	21.00 @ 22.00	23.00 @ 24.50	23.50 @ 25.00	23.00 @ 24.00
45-50 lbs.	21.00 @ 22.00	22.50 @ 23.50	23.00 @ 24.50	22.00 @ 23.00
LAMB, Good:				
30-40 lbs.	19.00 @ 21.00	21.50 @ 23.00	22.00 @ 23.50	21.00 @ 22.00
40-45 lbs.	19.00 @ 21.00	21.50 @ 23.00	22.00 @ 23.50	21.00 @ 22.00
45-50 lbs.	18.50 @ 20.50	21.00 @ 22.50	21.50 @ 23.00	20.00 @ 21.00
50-60 lbs.				
LAMB, Medium:				
All weights	17.00 @ 19.00	18.50 @ 21.50	19.00 @ 22.00	19.00 @ 21.00
LAMB, Common:				
All weights	15.00 @ 17.00		16.00 @ 19.00	
MUTTON (Ewe), 70 lbs. down:				
Good	9.00 @ 10.00	10.00 @ 11.00	9.00 @ 10.00	
Medium	8.00 @ 9.00	9.00 @ 10.00	8.00 @ 9.00	
Common	6.50 @ 8.00	7.50 @ 9.00	7.00 @ 8.00	
Fresh Pork Cuts: <sup>4</sup>				
LOINS, No. 1 (Bladeless Incl.):				
8-10 lbs.	24.00 @ 25.00	24.50 @ 25.50	23.00 @ 24.50	23.00 @ 24.00
10-12 lbs.	23.50 @ 24.50	24.50 @ 25.50	23.00 @ 24.50	23.00 @ 24.00
12-15 lbs.	20.50 @ 21.00	22.00 @ 24.00	21.00 @ 22.50	20.00 @ 21.00
16-22 lbs.	15.00 @ 16.50	18.00 @ 20.00		16.50 @ 18.50
SHOULDERS, Skinned, N. Y. Style:				
8-12 lbs.	13.00 @ 14.00		14.00 @ 15.00	
BUTTS, Boston Style:				
4-8 lbs.	17.00 @ 18.00		17.00 @ 18.50	16.50 @ 18.00
SPARE RIBS:				
Half Sheets	13.00 @ 14.00			
TRIMMINGS:				
Regular	8.00 @ 8.50			

<sup>1</sup>Includes heifer 300-450 lbs. and steer down to 300 lbs. at Chicago. <sup>2</sup>Includes Koshered beef sales at Chicago. <sup>3</sup>Includes skin on at Chicago and New York; equivalent weights skin off at Boston and Phila. <sup>4</sup>Based on 50-100 lbs. box sales to retailers.

All quotations in dollars per hundredweight. Beef, veal, calf, lamb and mutton prices apply to straight and calculated carcass bases.

### FAT SWINE SHOW

The eighth annual National Stock Yards Vocational Agriculture Fat Swine Show and Sale will be held at National Stock Yards, Ill., September 4 and 5. Fat hogs will be offered for sale to packers and others at auction on September 5.

There will be a judging contest for exhibitors, a trip through Armour plant and luncheon served, as guests of Armour and Company. Among those sponsoring the show, in addition to livestock commission firms, are: The American Packing Co., Armour and Company, Hunter Packing Co., Krey Packing Co. and Swift & Company.

# Tallow and Grease Demand Quiet but Markets Steadier

N. Y. extra and prime sell at 3½c—Producers have higher ideas and hold on firmly—Lower grade tallow and greases higher at Chicago.

**TALLOW.**—The New York tallow market displayed a steadier tone this week—but that is about all that can be said for it. It was estimated that possibly 500,000 lbs. changed hands at 3½c for extra, or perhaps slightly higher than that figure, but demand came mainly from dealers and not consumers.

Soapers were on the sidelines, but producers' ideas were stiffening as a result of continued improvement in lard and some of the competing oils. At one time during the week, a large midwestern soaper was bidding 3½c for October material, but even this bid was withdrawn later.

New York edible was quoted at 3½c; extra, 3¾c, and special, 3¼c.

Chicago tallow market was firm to strong this week, with considerable activity developing around midweek. Prices were up ¼@½c over last Friday. A few tanks of fancy sold Monday at 3½c and edible moved at 3¾c, Chicago basis. Tank of special sold at 3½c, c.a.f. outside point. Offerings were limited and firmly held; couple tanks fancy sold Tuesday at 3½c, Chicago, and prime at 3½c, Cincinnati. Couple tanks special sold early Wednesday at 3½c, c.a.f. outside point, and couple tanks were reported later at 3½c. Two tanks fancy moved at 3½c, Chicago basis. Few tanks of edible sold Thursday at 4c and prime at 3¾c; market was strong and fairly active. Tallow quotations on Thursday at Chicago were:

Edible tallow .....	4
Fancy tallow .....	3¾
Prime packers .....	3¾
Special tallow .....	3¾
No. 1 tallow .....	3¼

**STEARINE.**—Demand improved for oleo stearine at New York this week and uncovered a sold out position. Bids of 5½c, or ¼c above last sales, not only attracted no offerings but also uncovered sellers' ideas at the 5½c level. Buyers were not quite ready to come up to this figure.

At Chicago, the market displayed a steadier tone but was unchanged. Prime was 5c.

**OLEO OILS.**—Demand was light and the market steady and unchanged at New York. Extra was quoted at 6½@6¾c; prime, 6@6½c, and lower grades, 5½@6c.

The Chicago market was dull but steady. Extra was quoted at 7c and prime at 6½c.

**GREASE OILS.**—Demand was limited at New York and the market was easier. No. 1 was quoted at 6¾c; No. 2, 6½c; extra, 6¾c; winter strained, 7c;

extra No. 1, 6½c; prime burning, 8c, and prime inedible, 7½c.

Grease oil quotations at Chicago were as follows: No. 1, 6¾c; No. 2, 6½c; extra, 6¾c; extra No. 1, 6¾c; extra winter strained, 7c; special No. 1, 6½c; prime burning, 7¾c; and prime inedible, 7½c. Acidless tallow oil was 6½c.

**NEATSFOOT OIL.**—Demand was quiet and the market lower at New York. Extra was quoted at 6¾c; extra No. 1, 6¾c; prime, 7c; pure, 10¼c, and cold test, 15½c.

Neatsfoot oil quotations at Chicago were: Cold test, 15½c; extra, 6¾c; No. 1, 6¾c; prime, 7c, and pure, 10¼c.

**GREASES.**—A limited movement of greases, but a slightly steadier tone featured the market at New York this week. Business passing in yellow and house was at the 3c level. Demand was not heavy, but producers were inclined to offer less freely, pending developments. Soapers were inclined to look on for the time being.

At New York, choice white was quoted at 3¾c; yellow and house, 3@3½c, and brown, 2¾c.

The grease market brightened up at Chicago this week with more active trade; prices were up ¼@½c. Offerings were none too liberal and were firmly held. Couple of tanks of yellow sold Monday at 3c, c.a.f. outside point, and brown was reported sold at 3c, c.a.f., eastern point; bid of 3½c was reported for white grease. White grease moved Tuesday at 3½c and yellow at 3c, both c.a.f. outside point. White grease sold at midweek at 3½c, Chicago basis, and four tanks of yellow traded at 3c, Chicago, with same bid for more. Few tanks of choice white sold Thursday at 3½c, up ¾c, and yellow at 3½c. Grease quotations at Chicago on Thursday:

Choice white grease .....	3½
A-white grease .....	3½
B-white grease .....	3½
Yellow grease, 10-15 f.f.a. ....	3½ @ 3¾c
Yellow grease, 16-20 f.f.a. ....	3 @ 3½c
Brown grease .....	2¾

## TALLOW FUTURE TRADING

Monday, Aug. 26.—Close: Sept. 3.25; Dec. 3.40 n.

Tuesday, Aug. 27.—Close: Sept. 3.30 n; Dec. 3.45 n.

Wednesday, Aug. 28.—Close: Old—Sept. 3.30; Oct. 3.35; Dec. 3.45; Jan. 3.50, all n; no sales. New—Sept. 3.50 n; Oct. 3.55 n; Dec. 3.70@3.90; Jan. 3.75@3.95; Feb. 3.80@4.00; no sales.

Thursday, Aug. 29.—Close: Sept. 3.45; Dec. 3.60 n; no sales.

Friday, Aug. 30.—Close: Sept. 3.45n; Dec. 3.60n; no sales.

## BY-PRODUCTS MARKETS

Chicago, August 29, 1940

Trade was more active this week and by-products advanced generally with gains in blood, digester and dry rendered tankage.

### Blood

Dried blood sold late this week at \$2.60.

Unit	Ammonia
Unground .....	\$ 2.60

### Digester Feed Tankage Materials

Sales of 11@12% reported this week at \$2.75.

Unground, 11 to 12% ammonia .....	\$ 2.75
Unground, 8 to 10%, choice quality .....	2.75@3.00
Liquid stick .....	1.10

### Packinghouse Feeds

Packinghouse feed prices moved up.

Carlots,	Per ton
00% digester tankage .....	\$42.50
50% meat and bone scraps .....	42.50
Blood-meal .....	52.50
Special steam bone-meal .....	42.50

### Bone Meals (Fertilizer Grades)

Bone meals were quiet but advanced with other by-products.

Per ton	Steam, ground, 3 & 50 .....
	\$30.00@32.50

### Fertilizer Materials

Fertilizer materials were a little stronger with the tankage advancing.

Per ton	High grade tankage, ground .....
	\$ 2.00@ 2.25 & 10c
	Bone tankage, unground, per ton .....
	2.25@ 2.35

### Dry Rendered Tankage

Low test cracklings reported sold at 60c, Chicago basis, around midweek.

Per ton	Hard pressed and expeller unground, up to 48% protein (low test) .....
	.60
	above 48% protein (high test) .....
	.52½@ .55c
	Soft pressed pork, ac. grease and quality .....
	35.00
	Soft pressed beef, ac. grease and quality, ton .....
	30.00@32.50

### Gelatine and Glue Stocks

This market quiet at previous levels.

Per ton	Calf trimmings .....
	\$ 20.00
	Sinews, pimpls .....
	18.00
	Cattle jaws, skulls and knuckles .....
	30.00@32.50
	Hide trimmings .....
	13.00@14.00
	Pig skin scraps and trim, per lb., l.c.l. ....
	4@ 4½c

### Bones and Hoofs

Quiet prevailed in bones and hoofs and prices were unchanged.

Per ton	Round shins, heavy .....
	\$ 50.00
	light .....
	47.50@50.00
	Flat shins, heavy .....
	42.50@45.00
	light .....
	40.00
	Blades, buttocks, shoulders & thighs .....
	37.50@40.00
	Hoofs, white .....
	55.00
	Hoofs, house run, unassorted .....
	25.00
	Junk bones .....
	22.00@24.00

### Animal Hair

Market quiet with no change in price list.

Winter coil dried, per ton .....	\$30.00@35.00
Summer coil dried, per ton .....	22.50@25.00
Winter processed, black, lb. ....	6½@ 7c
	5½@ 6c
Summer processed, gray, lb. ....	3 @ 8½c
Cattle switches .....	2½@ 3½c

## FERTILIZER PRICES

BASIS NEW YORK DELIVERY

### Ammonites

Ammonium sulphate, bulk, per ton, basis ex-vessel, Atlantic ports.....	\$28.00
Blood, dried, 10% water unit.....	2.15
Ground fish scrap, dried, 11½% ammonia, 16% B. P. L., f.o.b. fish factory.....	3.10 & 10c
Fish meal, foreign, 11½% ammonia, 10% B. P. L., c.l.f. spot.....	51.00
August shipment.....	51.00
Fish scrap, acidulated, 70% ammonia, A. P. A. f.o.b. fish factories.....	2.50 & 50c
Soda nitrate, per net ton: bulk, ex-vessel	
Atlantic and Gulf ports.....	27.00
in 200-lb. bags.....	28.30
in 100-lb. bags.....	29.00
Fertilizer tankage, ground, 10% ammonia, 10% B. P. L. bulk.....	2.25 & 10c
Feeding tankage, ungound, 10-12% ammonia, 15% B. P. L. bulk.....	2.25 & 10c

### Phosphates

Foreign bone meal, steamed, 3 and 30 bags, per ton, c.i.f. ....	\$32.50
Bone meal, raw, 4½% and 50%, in bags, per ton, c.i.f. ....	30.50
Superphosphate, bulk, f.o.b. Baltimore, per ton, 16% flat.....	8.50

### Dry Rendered Tankage

50/55% protein, ungound.....	47½c
60% protein, ungound.....	47½c

## EASTERN FERTILIZER MARKETS

New York, August 28, 1940

There was more interest in the crackling market during the past week and cracklings were cleaned up at 45c per unit, f.o.b. New York, and no more material was available at this figure.

Tankage sold at \$2.10 and 10c, f.o.b. shipping points, with producers now asking \$2.25 and 10c f.o.b.

New nitrate of soda prices were announced by the Chilean people for shipment October forward, and they have advanced the price 50c per ton.

Blood sold at New York at \$2.15, with more material available at this figure. Additional sales of fish scrap were made at \$2.10 and 10c, f.o.b. Chesapeake Bay.

## CHICAGO COTTON OIL

Monday, Aug. 26.—Close: B.P.S. Sept. 5.52; Oct. 5.54; Dec. 5.63; Jan. 5.65; Mar. and May 5.77, all b; cash close 5.65 b.

Tuesday, Aug. 27.—Close: B.P.S. Sept. 5.50; Oct. 5.52; Dec. 5.59; Jan. 5.65; Mar. 5.73; May 5.75 all bid; cash cottonseed oil 5.60 b.

Wednesday, Aug. 28.—Close: B.P.S. Sept. 5.50 b; Oct. 5.52 b; Dec. 5.59 b; Jan. 5.65 b; Mar. 5.73 b; May 5.75 b; cash cottonseed oil close 5.60 b.

Thursday, Aug. 29.—Close: B.P.S. Sept. 5.53; Oct. 5.55; Dec. 5.64; Jan. 5.65; Mar. 5.79; May 5.77; all b; cash close 5.65 b.

Friday, Aug. 30.—Close: B. P. S. Sept. 5.61b; Oct. 5.65b; Dec. 5.70b; Jan. 5.90ax; Mar. 5.86b; May 5.90ax; cash cottonseed oil 5.75b.

**Careless work in hog scalding costs money.** Read "PORK PACKING," The National Provisioner's handbook on operations in the pork plant.

# Cottonseed Oil Makes Small Gains Daily on New Buying

Shorts cover on slow movement of new crop seed and crude—Improvement in lard and soybean oil play a part in recovery—Cotton oil steady.

**COTTONSEED** oil futures rose a few points daily during the week in more active trade in the New York market. Values went into new high ground for the current upturn and on the current positions showed gains of 40 to 45 points over the season's lows. September liquidation was absorbed on a scale upward.

New buying and short covering developed on a larger scale, mainly as a result of the slow movement of new crop seed and crude. However, strength in lard, a better market in soybean oil, and more steadiness in commodities aided in shaping the trend. The weather was reported to be none too good for the cotton, corn and soybean crops.

There was no particular improvement in consumer demand for cottonseed or other oils, although absorption was slightly better than it has been, but there was distinct improvement in cash lard demand. There were export inquiries for cottonseed and other edible oils with some business closed.

Most September liquidation was in switching to the later months, mainly to March at 25 and 24 points difference. No September tenders appeared on Wednesday, the first September notice day, and no important deliveries are anticipated unless refiners have difficulty in transferring September hedges to March at around the current differential. There was no strong evidence of oil being wanted on September contracts. The open interest in the spot month has been reduced and is now believed to be quite modest. As a matter of fact, the entire open interest in the market is comparatively small, open contracts having declined about 100 lots this week to 1,786 lots, the smallest figure yet reported.

Early estimates of August cotton oil consumption range between 250,000 and 260,000 bbls., slightly below July and considerably under volume in August,

## VEGETABLE OILS

Crude cottonseed oil, in tanks, f.o.b. Valley points, prompt..... 4½@4¾  
White deodorized, in bbls., f.o.b. Chgo..... 6½@6½  
Yellow, deodorized..... 6½@6½  
Soap stock, 50% f.t.a., f.o.b. consuming points..... 3½@3½  
Soybean oil, f.o.b. mills, in tanks..... 3½@3½  
Corn oil, in tanks, f.o.b. mills..... 3½@3½  
Coconut oil, sellers' tanks, f.o.b. coast..... 2½@2½  
Refined coconut, bbls., f.o.b. Chicago..... 7¾@8

## OLEOMARGARINE

F. O. B. CHICAGO

White domestic vegetable..... 14½  
White animal fat..... 11½  
Water churmed pastry..... 12  
Milk churmed pastry..... 13  
White "nut" type..... 8  
Vegetable type..... 7½

1939, when consumption ran approximately 300,000 bbls.

**COCONUT OIL.**—Trade was rather limited at New York and the market steady at 2½c for bulk oil. The Pacific coast price held at 2¼c.

**CORN OIL.**—Offerings continued scarce. The only business heard of was the sale of a car from Indianapolis at 5½c.

**SOYBEAN OIL.**—Strength in soybeans and less rosy reports on the new bean crop, along with higher cotton oil and lard prices, led to improvement in soybean oil values. Old crop at New York sold at 4½c, up ¼c from inside level, while new crop sold at 3¾c, or up ¼c.

**PALM OIL.**—The market was dull and featureless at New York. Sumatra was quoted at 1¾c and Nigre at 2¼c.

**OLIVE OIL FOOTS.**—Trade was slow at New York, but the price was steady at 8¾c for tanks.

**PEANUT OIL.**—The market was nominally around 5½c, f.o.b. mills.

**COTTONSEED OIL.**—Valley and Southeast crude were quoted Wednesday at 4¾c nominal; Texas, 4½@4¾c nominal at common points; Dallas, 4% @4¾c nominal.

Futures market transactions for the week at New York were:

FRIDAY, AUGUST 23, 1940

	Range			Closing— Sales Bid Asked
	Sales	High	Low	
September . . . . .	31	554	553	552 554
October . . . . .	5	555	554	555 557
November . . . . .	5	555	554	555 bid
December . . . . .	5	565	564	565 trad
January . . . . .	11	572	567	567 569
February . . . . .	11	572	567	570 nom
March . . . . .	49	579	575	576 577
April . . . . .	49	579	575	580 nom

Sales 101 contracts.

MONDAY, AUGUST 26, 1940

	Range	High	Low	Closing— Sales Bid Asked
September . . . . .	80	563	553	564 566
October . . . . .	11	567	556	567 568
November . . . . .	11	567	557	567 bid
December . . . . .	1	565	565	578 580
January . . . . .	2	582	582	582 trad
February . . . . .	2	582	582	584 nom
March . . . . .	113	590	579	590 trad
April . . . . .	132	597	588	594 nom

Sales 207 contracts.

TUESDAY, AUGUST 27, 1940

	Range	High	Low	Closing— Sales Bid Asked
September . . . . .	112	570	563	570 571
October . . . . .	21	575	565	570 trad
November . . . . .	18	583	576	582 583
December . . . . .	3	580	580	583 586
January . . . . .	3	580	580	583 nom
February . . . . .	132	597	588	594 trad
March . . . . .	132	597	588	598 nom

Sales 286 contracts.

WEDNESDAY, AUGUST 28, 1940

	Range	High	Low	Closing— Sales Bid Asked
September . . . . .	14	575	575	575 578
October . . . . .	12	577	565	577 trad
November . . . . .	11	589	574	589 592
December . . . . .	2	592	592	594 nom
January . . . . .	2	592	592	594 nom
February . . . . .	18	601	598	600 601
March . . . . .	18	601	598	604 nom

Sales 89 contracts.

THURSDAY, AUGUST 29, 1940

	Range	High	Low	Closing— Sales Bid Asked
September . . . . .	30	578	575	575 bid
October . . . . .	22	579	576	575 bid
November . . . . .	16	590	587	586 bid
December . . . . .	2	592	592	588 bid
January . . . . .	2	592	592	588 bid
February . . . . .	18	601	598	597 bid
March . . . . .	8	598	597	597 bid

(See page 34 for later markets.)

## SLICES, SHINGLES, STACKS

Bacon, Dried Beef, Boneless Meats, Ham, Chip Steaks, Cheese

Here's a sure way for medium size establishments to increase yield and profits. The U. S. Model 150-B with its **Continuous Feed** operates efficiently, economically, automatically—pays for itself in a short time.

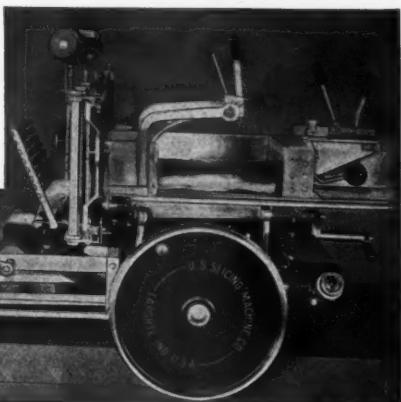
You can slice and shingle right onto the conveyor or stack slices on trays, without re-setting machine or handling food or slices from start to finish. Plugs in any electric socket. Equipped with  $\frac{1}{4}$  H. P. motor.

*Literature with complete details on request*

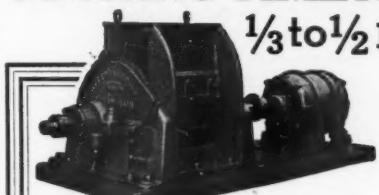
### U. S. SLICING MACHINE CO.

World's First and Finest Slicers for More than 40 Years  
La Porte, Ind.

U. S. Model 150-B takes meats up to 24" long. Slices any thickness from  $\frac{1}{64}$ " to  $\frac{5}{16}$ ".



## COOKING TIME REDUCED



$\frac{1}{3}$  to  $\frac{1}{2}$  By Grinding  
in the  
**M & M HOG**  
CUTS RENDERING COSTS

Sizes and types to meet every requirement. Write for Bulletins.

**MITTS & MERRILL**  
Builders of Machinery Since 1854  
1001-51 S. Water St., Saginaw, Mich.

## SPECIAL X

### SOY FLOUR IS THE IDEAL BINDER

The improved slicing qualities of Sausage, Meat Loaves, and Specialties made with "SPECIAL X" Soy Flour definitely aid in increasing sales and profits. "SPECIAL X" absorbs and holds natural oils and juices, thus assuring natural color and finer flavor. "SPECIAL X" meets all the requirements of the ideal binder! Send for your free sample today!

## SPENCER KELLOGG & SONS, INC.

SOYA PRODUCTS DIVISION • DECATUR, ILLINOIS



## SCIENTIFICALLY DEVELOPED

Seven practical packing plant scientists are constantly at work in Stange's three completely equipped laboratories developing new and improved methods for curing, coloring and seasoning. This is only one of the factors that guarantee profits for you by using Stange Products.

### W.M. J. STANGE CO.

2536-40 W. MONROE ST., CHICAGO

Western Branches: 923 E. 3rd St., Los Angeles, 19250 Sansome St., San Francisco. In Canada: J. H. Stafford Industries, Ltd., 24 Hayter St., Toronto, Ont.



## STEDMAN 2-STAGE GRINDERS

for CRACKLINGS, BONES, DRIED BLOOD TANKAGE and OTHER BY-PRODUCTS

Grind cracklings, tankage, bones, etc., to desired fineness in one operation. Cut grinding costs, insure more uniform grinding, reduce power consumption and maintenance expense. Nine sizes—5 to 100 H.P.—capacities 500 to 20,000 lbs. hourly. Write for catalog No. 302.

**Stedman's FOUNDRY & MACHINE WORKS**  
504 INDIANA AVE., AURORA, INDIANA, U. S. A.

## COTTON PRODUCTS TO FIT ALL PACKING HOUSE REQUIREMENTS

Double Duty Shrouds • Stockinette Tubing • Stockinette Bags • Cattle Wipers • Cheesecloth • Rags • Waste Muslin • Towels • Aprons • Send for Samples!

## PINK SUPPLY COMPANY

735 N. THIRD ST., MINNEAPOLIS, MINNESOTA

## Present Hide Situation

(Continued from page 10.)

12,000,000 men. It is now estimated the conscript total may be 900,000.

It is pointed out in the trade that any government buying will be only a small percentage of total annual production of around 400 million pairs of shoes. Moreover, although Army purchases will undoubtedly stimulate business, the effect may be somewhat neutralized by an equivalent decline in civilian shoe demand.

The fact that shoe production declined during the first half of 1940, after reaching a record high in 1939, is believed to be a normal development, since there was probably some carryover from last year which was worked off in the first six months of 1940. It is believed that the way is now clear for an increase in shoe output.

**PRICES.**—The trend in spot hide prices has been steadily downward since the war boom of last October. The monthly average price of packer heavy native steers since June, 1939, is shown here:

	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.
1940:	10.1	11.2	10.5	11.8	12.7	12.6	12.9	14.0
1939:	14.4	14.6	16.5	14.6	11.6	11.5	11.0	

Nearby hide futures on the New York exchange have recently been running considerably under spot quotations at Chicago. The following table compares Friday prices of the nearby month in the futures market with the Chicago spot price for light native cows:

	Futures (Sept.)	Spot
1940		
August 23.....	8.27	9.50
August 16.....	8.05	10.25
August 9.....	8.83	10.62
August 2.....	8.90	10.62
1939		
August 25.....	10.25	10.50
August 18.....	9.87	11.00
August 11.....	10.55	12.00
August 4.....	11.14	12.00

Hide futures are now displaying a stronger tendency and may come more

into line with the cash hide market.

**SUMMARY.**—The statistical position of domestic hides, as shown here, appears to be good, although the possibility of a greater volume of imports must not be disregarded. The future status of hides and hide prices now depends largely on demand. Various agencies have reported that conditions affecting domestic demand continued to improve in July, with industrial employment and payrolls rising.

## BRITISH BEEF SUPPLIES

Domestic British cattle, under a new policy, are to be carried on to heavier weights, with quantity of meat and not quality as the aim in beef production. Beef cattle are now designated as a beef reserve, to be maintained "on the hoof" for future emergency requirements of the nation, according to reports from the foreign office of the U. S. Department of Agriculture.

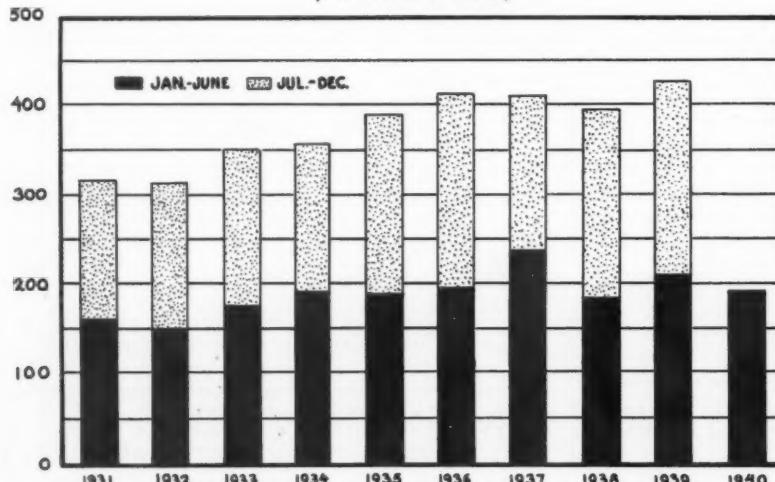
If imports of meats are seriously reduced, authorities are prepared to use all of the domestic supplies. Additional cost incurred in carrying cattle and sheep will be met by a higher scale of fixed slaughter prices. Fat-cattle prices have been increased from 10 to 15 per cent and sheep prices also have been raised.

## JULY PRODUCTION HEAVY

Production of packinghouse commodities during July, while declining from the June tonnage level, was the highest for the month since 1934. Tonnage sales rose 3 per cent over June, while dollar sales were up only 1 per cent. Inventories declined, as was to be expected with heavier sales and lighter production. European business, other than shipments on British Government contracts placed in June, was negligible. Latin American trade remained at the level of the preceding month.

## U.S. BOOT AND SHOE PRODUCTION

(IN MILLIONS OF PAIRS)



## Food Supplies Ample

(Continued from page 17.)

that country decided to buy in the United States. The total volume of pork available for export could be increased to about 400 million lbs. without resulting in unusually high hog prices or creating any real domestic shortage. A total of 500 million lbs. of lard could be shipped to Europe if wanted, after allowing for the 100 to 150 million lbs. which may go to other countries.

In addition, 250 million lbs. of edible vegetable oil is available for export either as oil or seed. This 250 million lbs. of oil could be supplied as soybeans, equivalent to about 26 million bus., or part of it could be made available in the form of cottonseed oil. This makes a total of 750 million lbs. of vegetable and animal fats and oils available for export to European countries, aside from the 100 to 150 million lbs. going to usual export outlets.

In addition to the foregoing commodities, sizeable surpluses of which are usually or frequently available for export, there are a number of commodities which could be made available in considerable volume if necessary.

## Turkey Stocks Heavy

For example, there are at present large storage stocks of turkeys, of which perhaps 30 million lbs. could be shipped abroad without endangering domestic supplies. If Great Britain should desire to procure quantities of evaporated milk and butter formerly obtained from Denmark and Holland, she would be able to do so without greatly affecting domestic prices or the supplies remaining for consumption in the United States.

In fact, there is hardly an important article of food which might be required by Great Britain or other countries now in a position to make purchases in the United States which could not be supplied in ample quantity if need should arise. This statement, of course, presupposes that Great Britain would continue to obtain certain commodities from other sources readily available, such as beef from the Argentine.

It appears, therefore, that if any shortages of foodstuffs should develop in the United Kingdom or other European countries it will not be because of their lack of availability in the United States, but rather will be a result of the lack of ability or desire on the part of the foreign nations involved to buy from this country or to difficulties encountered in effecting delivery of the purchased commodities.

## FLASHES ON SUPPLIERS

**B. F. GOODRICH CO.**—Appointment of J. E. Powers as manager of the truck and bus tire department has been announced by the B. F. Goodrich Co., manufacturers of rubber products at Akron, O. Mr. Powers succeeds W. C. Bray, who has been transferred to other duties.

# HIDES AND SKINS

Heavy volume traded last week results in price advance on smaller quantities moved this week—Native, butt brand, Texas and Colorado steers sell 3/4c up.

## Chicago

**PACKER HIDES.**—Packer hides firmed up this week following broad trading the previous week, at 1/2c down, when approximately 125,000 hides changed hands. Prices realized last week were the lowest since the spring of 1939. Included in the movement were 25,000 native steers at 9 1/4c; 8,000 extra light native steers at 10c; 6,000 heavy native cows at 9 1/4c and 9 1/2c; 12,000 river light native cows at 9 1/4c; 9,000 northern light native cows at 9 1/4c; 4,000 butt branded steers at 8 1/4c; 28,000 Colorados at 8 1/4c for July and August and 7 1/2c for May; 700 light Texas steers at 7 1/2c; extra light Texas steers at 9c; 25,000 branded cows at 8 1/2c for July and August and 8 1/4c for May and June and 3,000 native bulls at 7c.

There was considerable further trading this week, but total quantities changing hands could not be verified. Included in the trading, however, were 2,000 native steers at 10 1/2c, 3/4c up; 3,000 butt branded steers at 9 1/4c, 3/4c up; 5,400 heavy Texas steers at 9 1/4c and 2,700 Colorado steers at 9c, 3/4c up, all August take-off.

Cow hides sold rather liberally at 3/4c to 1c advance over the prices at which these descriptions changed hands a week earlier. About 6,000 northern light native cows sold at 10 1/2c. Branded cows were sold at 9 1/4c. Light native cows were up the full cent from the lows of last week. The branded cows were 3/4c higher. Association reported the sale of 2,000 light native cows at 10 1/2c.

Bulls sold in a limited way at prices steady with those secured last week. Included in the movement were 1,500 native bulls at 7 1/2c and 800 branded bulls at 6 1/2c.

Open position in hide contracts (sales side only) at the close of business on August 28 decreased 54 lots to 1,941 contracts and included 172 in September, 1,054 in December, 590 in March and 125 in June. Futures in New York mixed and from 2 points lower to 5 points higher.

**OUTSIDE SMALL PACKER HIDES.**—There was apparently a little more interest in outside small packer offerings following the advance in price in big packer hides, and the market appeared to be in a better position. Market was quoted last week at 8@8 1/4c nominal for native allweights, selected, Chicago basis. There were reports this week that this description had sold at 9 1/4c, but this could not be verified. However, the market is being quoted at this figure, with brands 1/2c less. Branded bulls were quoted at 6 1/2@6 1/4c.

A car of moderately heavy stock was sold last week at 8 1/2c. The sale of 750 of Kansas City heavy native cows at 7 1/2c was reported.

**PACIFIC COAST.**—Local Vernon packers this week sold 10,000 May-June hides, understood to be steers and cows, at 7 1/2c flat, f.o.b. Los Angeles. Last previous sales in this territory were made last week when 5,000 hides moved at 6c for steers and 7c for cows.

**FOREIGN WET SALTED HIDES.**—There was some trading in the South American market this week at steady to somewhat lower prices. Included in the movement were 15,000 frigorifico hides early at 54 pesos, 12,000 grubby hides at a price equal to about 7 1/2c, c.i.f. New York and 14,000 frigorifico hides at mid-week at 49 pesos, equal to about 7 1/2c. The last previously reported sales in this market were 12,000 frigorifico rejects steers at 49 pesos and 4,500 Smithfield standards at 54 pesos.

**COUNTRY HIDES.**—There was some interest in country hides early in the week and somewhat higher prices were asked, but the market was quiet and quoted nominally as the period closed. Sellers were withholding offerings, apparently being influenced by the gains in the big packer market and advances in futures. Extremes were quoted at 10@10 1/4c selected; 43-58 lb. buff weights, trimmed, selected, delivered, 8 1/2c; untrimmed allweights, flat, delivered, 7c; heavy cows, 6c; glues, 6c; bulls, 5c; calf and kip, 10c.

**CALFSKINS.**—August production of packer calfskins were well cleaned up two weeks earlier when three packers sold at a basis of 21c for northern heavies, 19 1/2c for river point heavies and 15c for lights. Southern calf sold at 15c. Another packer's August production of northern heavies and lights sold last week at 21c and 15c respectively.

Sales of city calfskins were made this week on a basis of 17c for 10/15 lbs. and 13c for 8/10 lbs. Last previous trading was three cars of 8/10 lb. at 12c. Bids of 15c were reported declined last week for 10/15 lb. Stocks are reported very low. Straight countries continue to be quoted in a nominal way at 10c.

**KIPSKINS.**—Packer kipskins sold this week early at 18c for northerns and 17c for southerns. Three packers participated and approximately 10,000 skins changed hands. Later 6,000 August overweights sold at 17c for northerns and 16c for southerns, and about 2,000 June-July-August branded kips were moved at 14 1/2c. July northern kipskins last sold at 18c; northern overweights, 16 1/2c.

No sales of Chicago city kipskins were made up to a late hour this week, and the market is quoted at 16c nominal pending trading to establish values.

Stocks are not heavy and there does not appear to be any anxiety on the part of sellers. Straight countries are being quoted in most directions at 10c.

There were no sales of packer slunks this week, and values are rather difficult to determine. Bids of 60@65c probably would get attention.

**HORSEHIDES.**—This was another very slow week in the horsehide market. Buyers were showing indifference and sellers did not appear to care to give further inducements at the moment to move stocks. Prices are quoted about unchanged and nominal. City renderers with manes and tails are being priced at \$4.80@5.00, selected, f.o.b. nearby sections. Ordinary trimmed renderers are considered to be worth \$4.80@4.75, delivered Chicago. Mixed city and country lots are quoted at \$4.00@4.50.

**SHEEPSKINS.**—Dry pelts have been in somewhat better demand this week, sales at 20 1/2c for full wools, delivered Chicago, having been reported. This price is 1 1/2c higher than last week's quotations. Production of shearlings continues light and the market is quoted steady. No. 1's are valued at \$1.35, No. 2's at 90@95c and No. 3's at 50c. Pickled skins are quoted at \$5.00@5.50. Sales of these skins were made last week at \$5.00. No information on trading in outside packer August pelts was made available this week. One lot, largely western take-off, sold last week at \$1.60.

## New York

**PACKER HIDES.**—The New York packer hide market is reported cleaned up to September 1, following sales this week of August butts and Colorados totaling about 6,000 pieces at 9 1/2c for the former and 9c for the latter. There were also quiet clean-up sales of earlier production. Butts last sold at New York at 9 1/2c for July take-off. Last previous sales of Colorados, July salting, were at 9c.

**CALFSKINS.**—No calfskin sales were made by packers or collectors in the New York market this week. Sales last week included 9-12's at \$3.10, 12-17 buttermilks at \$2.95, one car of 5-7's at \$1.00, 3,000 7-9's at \$1.50 and 2,000 4-5's at 85c.

## ARGENTINE BEEF EXPORTS

Cable reports of Argentine exports of beef this week up to August 30, 1940: To the United Kingdom, 49,820 quarters; to the Continent, none. A week ago, to the United Kingdom, 126,801 quarters; to Continent, none.

## NEW YORK HIDE FUTURES

Monday, Aug. 26.—Close: Sept. 8.48@8.50; Dec. 8.73@8.76; Mar. 8.93; June 9.10 n; 314 lots; 22@28 higher.

Tuesday, Aug. 27.—Close: Sept. 8.75; Dec. 8.95@8.96; Mar. 9.15; June 9.38 n; Sept. (1941) 9.52 n; 262 lots; 22@28 higher.

Wednesday, Aug. 28.—Close: Sept.

8.95@8.98; Dec. 9.13; Mar. 9.32; June 9.50 n; Sept. (1941) 9.68 n; 426 lots; 12@20 up.

Thursday, Aug. 29.—Close: Sept. 9.00; Dec. 9.11@9.12; Mar. 9.30; June 9.49 n; Sept. (1941) 9.68 n; 5 higher to 2 lower; 201 lots.

Friday, Aug. 30.—Close: Sept. 9.45@9.50; Dec. 9.50; Mar. 9.75; June (1941) 9.99; Sept. (1941) 10.05; 213 lots; closing 37@49 higher.

### 1940 PORK-LARD STOCKS

Stocks of lard on August 1, totaling 303 million lbs., were a little smaller than a month earlier, but were 163 million lbs. larger than stocks on the same date in 1939.

Storage stocks of lard on the first of each month during the current marketing year, with comparative data:

	1939-40	1938-39	5-yr. avg.
	Million lbs.		
October	78.8	80.9	87.6
November	68.7	67.7	69.6
December	89.0	74.5	71.8
January	162.1	107.4	95.6
February	202.2	132.1	120.5
March	256.6	125.3	126.7
April	268.8	129.3	129.9
May	266.1	129.5	129.1
June	283.9	139.3	129.4
July	303.7	148.4	130.2
August	303.1	139.8	121.2

Total stocks of pork on August 1 amounted to 549 million lbs. This was about 50 million lbs. smaller than July 1 stocks, but about 94 million lbs. larger than stocks on August 1, 1939. Stocks of pork on the first of each month during the current marketing year:

	1939-40	1938-39	5-yr. avg.
	Million lbs.		
October	300.2	277.2	344.6
November	272.7	245.5	322.7
December	323.3	290.1	378.9
January	460.5	430.1	502.0
February	588.6	526.4	584.6
March	650.7	542.1	603.7
April	652.7	523.2	580.1
May	612.0	527.2	561.3
June	592.6	520.3	515.7
July	598.5	496.8	474.7
August	548.8	454.8	422.6

### NEW STAMP PLAN AREAS

Extension of the food stamp plan for distributing surplus agricultural commodities, including pork and lard, to four new cities and 13 counties has been announced by Claude R. Wickard, Under Secretary of Agriculture. The latest areas include: Seminole, Okla., and the rest of Seminole county; Chickasha, Okla., and the rest of Grady county; Perth Amboy, N. J.; North Adams, Mass., and the counties of Apache, Navajo, Graham, Greenlee, Coconino, Mohave, Yavapai, Yuma, Pima, Cochise and Santa Cruz, all in Arizona. The stamp plan now extends to all counties in Arizona.

### MEAT AND LARD EXPORTS

Exports through port of New York during week ended August 30 totaled 1,500,000 lbs. of lard.

# WEEK'S CLOSING MARKETS

### FRIDAY'S CLOSING

#### Provisions

Lard eased slightly under profit taking, with some letup in cash demand, but continued strength in hogs and firmness in loose lard encouraged buying on setbacks. The approaching holidays and September tender day created a disposition to look on temporarily.

#### Cottonseed Oil

Cotton oil eased a few points from the week's highs with holiday evening up and undertone very steady. Southeast and Valley crude, 4% lb. nom.; Texas, nearby, 4% lb., sales; Texas seed, \$20.00 ton. New crop soy bean quoted at 3%@4c lb.

Quotations on bleachable cottonseed oil at close of market on Friday were: Sept. 5.85; Oct. 5.84@5.87; Dec. 5.94@5.96; Jan. 5.97@5.98; Mar. 6.05@6.06; 117 lots; closing firm.

#### Tallow

New York extra tallow, 3% c lb.

#### Stearine

Stearine was quoted 5%@5% c lb.

#### Friday's Lard Markets

New York, Aug. 30, 1940.—Prices are for export. Lard, prime western, 5.65@5.75c; middle western, 5.55@5.65c; city, 5%; refined continent, 6% c; South American, 6% c; Brazil kegs, 6% c; shortening 8% c.

### Authoritative and Complete

• Practical ideas on plant layout . . . operating troubles and how to correct them . . . formulas and processing directions. Dependable information on these and a host of related topics makes • SAUSAGE AND MEAT SPECIALTIES • an invaluable aid to the progressive packer and sausage manufacturer. It answers the questions most often asked. Its broad scope covers materials used in sausage and meat specialty manufacture, an outline of major governmental regulations controlling sausage manufacture and numerous other phases of sausage manufacturing. • Place your order today for this Volume 3 of the Packer's Encyclopedia. Postpaid price, \$5.00.

THE NATIONAL PROVISIONER  
407 So. Dearborn St., Chicago, Ill.

Enclosed is check or money order for \$5.00 for copy of "Sausage and Meat Specialties."

Name .....

Street .....

City .....

### CHICAGO HIDE QUOTATIONS

Quotations on hides at Chicago for the week ended August 31, 1940, with comparisons, are reported as follows:

PACKER HIDES		Prev. week	Cor. week, 1940
Week ended	Aug. 31		
Hvy. nat.	@ 10%	@ 9%	16% @ 17%
strs.	@ 9%	@ 9%	16 @ 16%
Hvy. butt brnd'd	@ 9%	@ 8%	16 @ 16%
strs.	@ 9%	@ 8%	15% @ 16%
Hvy. Col.	@ 9	@ 8	15% @ 16%
strs.	@ 9%	@ 9	15% @ 16%
Ex. light Tex.	@ 9%	@ 9	15% @ 16%
strs.	@ 9%	@ 9	15% @ 16%
Brnd'd cows.	@ 9%	@ 8% n	15% @ 16%
cows	@ 10% n	@ 9%	16 @ 16%
Lt. nat. cows.	10% @ 10% n	9% @ 10	16 @ 16%
Nat. bulls	@ 7%	6% @ 7%	12 @ 13%
Brnd'd bulls	@ 6%	6% @ 6%	11 @ 12%
Calfskins	15 @ 21	15 @ 21	27 @ 28%
Kips, nat.	17 @ 18	17% @ 18	22% @ 23%
Kips, ov. wt.	16 @ 17	16 @ 17	20 @ 21%
Kips, brnd'd	14 @ 14%	14 @ 15%	20 @ 21%
Slunks, reg.	65 @ 65	65 @ 55	1.25 @ 1.40n
Slunks, hrs.	45 @ 50	45 @ 50	1.25 @ 1.40n

Light native, butt branded and Colorado steers 1c per lb. less than heavies.

#### CITY AND OUTSIDE SMALL PACKERS

Nat. all-wts.	@ 9% ax	8	14	@ 15
Branded	@ 9% ax	7% @ 8% n	13% @ 14%	@ 11%
Nat. bulls.	6% @ 6%	6	6	6 @ 10% n
Brnd'd bulls	5% @ 5%	5	6	6 @ 7%
Calfskins	13 @ 17	11 @ 15%	23 @ 25%	
Kips	16n @ 15%	16 @ 16	21 @ 21%	
Slunks, reg.	@ 60n	75n	1.00 @ 1.25n	
Slunks, hrs.	@ 40n	45	@ 60n	

#### COUNTRY HIDES

Hvy. steers.	@ 6	6	15% ax	10% @ 11%
Hvy. cows.	@ 6	5% n	10% @ 11%	
Buffs	@ 8%	7% @ 7%	13	@ 13%
Extremes	10 @ 10%	9 @ 9%	15	@ 15%
Bulls	@ 5	4 @ 4%	8 @ 9%	
Calfskins	@ 10	10	10	@ 17%
Kips	@ 10	10	10	@ 17%
Horsehides	4.00 @ 5.00	4.25 @ 5.00	4.50 @ 5.75	

#### SHEEPSKINS

Pkr. shearlgs.	1.30 @ 1.35	1.30 @ 1.35	1.50
Dry pelts	.17 @ 19	17 @ 19n	20 @ 21n

### CHICAGO HIDE MOVEMENT

Receipts of hides at Chicago for the week ended August 24, 1940, were 3,553,000 lbs.; previous week 3,454,000 lbs.; same week last year 3,974,000 lbs.; Jan. 1 to date, 159,207,000 lbs.; same period last year, 159,733,000 lbs.

Shipments of hides from Chicago for week ended August 24, 1940, were 5,460,000 lbs.; previous week 5,107,000 lbs.; same week last year 5,473,000 lbs.; Jan. 1 to date, 175,429,000 lbs.; same period last year, 155,027,000 lbs.

### CHICAGO PROV. SHIPMENTS

Provision shipments from Chicago for the week ended on August 24, 1940:

Week	Previous	Same
August 24	week	week '39
Cured meats, lbs.	18,478,000	17,599,000
Fresh meats, lbs.	56,583,000	58,633,000
Lard, lbs.	5,376,000	3,056,000

### WATER HURTS FRESH MEAT

Did you know that water is one of the greatest enemies of fresh meat? Read chapter 5 of "PORK PACKING," The National Provisioner's latest book, and have your men read it.

## Canada Packers' Report

(Continued from page 7.)

Canada's war effort developed. The second period brought an increase of some 17.3 per cent in sales.

Sales for the year totalled \$88,205,629 compared with \$77,225,732 for the previous year. After all charges, including provision of \$1,194,515 for taxes, and after setting aside a special wartime inventory reserve of \$570,000, the operating profit was \$1,661,972 compared with \$1,242,365 a year earlier. Addition of other income brought net profit to \$1,667,809 against \$1,238,736 in the 1939 fiscal year. This net was equal to \$8.34 per common share against \$6.19 per common share in the previous year. Earned surplus was carried forward at \$8,106,941.

Net working capital was reported at \$7,378,691 against \$6,679,226. Inventories at the year's close were valued at \$10,947,397, while bank loans, etc., rose from \$2,660,963 to \$7,155,590. Accounts receivable were \$5,340,751 compared with \$3,423,672 a year earlier. During the year, outstanding collateral trust bonds amounting to \$750,000 were redeemed and cancelled.

Reviewing the effects of the war on the company's business, the development of the British market, especially since supplies of Danish and Dutch bacon have been cut off from Britain, President McLean warned of the problem confronting Canadian hog producers as a result of the decision of the Brit-

ish Ministry of Supply to restrict imports of bacon to 5,600,000 lbs. weekly.

"If heavier shipments are not taken," he stated, "Canadian hog producers will this fall find themselves in a most embarrassing position. Beginning in September or October, it is certain that hog marketings will heavily exceed all previous records. The Canadian farmer has produced these hogs in the belief that by so doing he was playing his part in the general war effort.

"If Canada wishes to retain the British market after the war she must produce exactly the type of bacon the British consumer wishes, so that at the end of the war, the British consumer will demand Canadian bacon instead of refusing to eat it.

"The present is Canada's opportunity. She is now almost the sole external source of supply for British bacon and this may continue for a period of one or two or three years. If, during that period, Canada provides the British consumer with exactly the type of bacon he requires, then the demand at the end of the war might be for Canadian bacon, and the dream of 60 years might be realized. Canada would find herself in the preferred position on the British market which Denmark has held for that length of time.

"To that end, one change in trade practice would contribute more than all others: That all Canadian hogs should be marketed on a dressed weight basis. This would make possible accurate grad-

ing, both in respect of quality and size-ability, and would permit accurate appointment of premiums for select hogs, and penalties for undesirable types. The adoption of universal rail trading is a step which can be enjoined only by the Federal Department of Agriculture, and it is to be hoped that no time will be lost in establishing this practice."

## New Lard Definition

(Continued from page 9.)

customary in many plants, for example, to send certain whole carcasses to the lard tank. This practice cannot be followed after November 1, as it will be necessary to bone out these carcasses. Pickle fats cannot be used in lard when the new definition goes into effect. Therefore, some packers may wish to fat certain cuts, particularly hams, before sending them to freezer or cellar.

Q.—Will a new type or style of carton be required for the new lard?

A.—Probably not.

Some inquirers ask whether packers generally object to the definitions. THE NATIONAL PROVISIONER has been able to obtain opinions from only a few packers. These are in favor of any move which will improve the average quality of lard and better its competitive position. They are not sure that the definitions will accomplish such results, but are not objecting to the definitions.

# OLD PLANTATION SEASONINGS

## Its Flavor Sells Sausage

BLENDED TO FIT YOUR PRODUCT—NATIONALLY USED  
IN LEADING SAUSAGE PLANTS—SAMPLES ON REQUEST

Exclusive MANUFACTURERS

A. C. LEGG PACKING CO., Inc., BIRMINGHAM, ALA.

### A COMPLETE VOLUME

of 26 issues of THE NATIONAL PROVISIONER can be easily filed for reference to items of trade information or trade statistics by putting them in our

#### New Multiple Binder

Simple as filing letters in an ordinary file. Looks like a regular bound book. Cloth board cover and name stamped in gold. Priced at \$1.75, postpaid. Send us your orders today.



THE NATIONAL PROVISIONER

407 South Dearborn St. Chicago, Ill.

No key, nothing to unscrew.  
Slip in place and they stay there until you want them

### IT'S THE "GOOD OLD-FASHIONED FLAVOR"

### THAT SELLS SAUSAGE

Taste varies in different parts of the country. The secret of success is to flavor your meat specialties to please the taste of people in your locality. Rely on our experience to prepare seasoning formulas that click with your customers. Let us consult with you to develop products that taste better . . . and sell better. Write us!



H. J. MAYER & SONS CO.

6819-27 SOUTH ASHLAND AVENUE • CHICAGO, ILLINOIS

Canadian Sales Office: 159 Bay Street, Toronto. Canadian Plant: Winnipeg, Ont.

## MEATIER POULTRY SOUGHT

"What poultrymen can learn from the meat industry," will be the theme of discussions by several men associated with the meat packing industry at a conference to be held on September 4, in connection with the annual meeting of the National Advisory Committee on Research in Poultry and Egg Subjects. E. N. Wentworth, director of Armour and Company's livestock bureau, will be chairman of the conference, which will be held at the Lake Shore Athletic club, Chicago.

Prof. D. L. Mackintosh of Kansas State college, Manhattan, Kans., will tell how beef was improved through breeding. Other speakers will include: Dr. W. A. Kraft, U. S. Department of Agriculture Swine Breeding Laboratory, Ames, Ia., and A. T. Edinger, U. S. Meat Grading Service, Washington, D. C.

## Meat Campaign Plans

(Continued from page 7.)

Southwest, meetings were held in Dallas, Houston, and San Antonio. The schedule of the Institute's forthcoming regional meetings is given on page 7. The schedule of retailer mass meetings, as it has been arranged to date, is as follows:

### EASTERN RETAILER MEETINGS

St. Louis, Mo., September 9; Cincin-

nati, O., September 11; Louisville, Ky., September 12; Rochester, N. Y., September 16; Boston, Mass., September 17; New York, N. Y., September 19; Philadelphia, Pa., September 20; Baltimore, Md., September 23; Pittsburgh, Pa., September 24; Cleveland, O., September 26, and Detroit, Mich., September 27.

### WESTERN RETAILER MEETINGS

Dallas, Tex., September 4; San Antonio, Tex., September 5; Houston, Tex., September 6; Phoenix, Ariz., September 9; Los Angeles, Cal., September 10; San Francisco, Cal., September 12; Sacramento, Cal., September 13; Portland, Ore., September 16; Seattle, Wash., September 17; Spokane, Wash., September 18; Boise, Ida., September 18; Ogden, Utah, September 19, and Denver, Col., September 19.

## PACKER AND FOOD STOCKS

Price ranges and total sales of listed stocks for week ended August 28:

	—Week ended August 28—			Aug. 21	
	Sales	High	Low	Close	Close
Amal. Leather. . . . .	200	1 1/4	1 1/4	1 1/4	1 1/4
Do. Pfd. . . . .	4	3 1/2	4	4	4
Amer. H. & L. . . . .	1,300	12	12	12	12
Do. Pfd. . . . .	100	4 1/2	4 1/2	4 1/2	4 1/2
Amer. Stores. . . . .	100	12	12	12	12
Amour. Ill. . . . .	9,300	4 1/2	4 1/2	4 1/2	4 1/2
Do. Fr. Pfd. . . . .	1,200	42	42	42	42
Do. Del. Pfd. . . . .	—	—	—	—	64 1/2
Beechnut Pack. . . . .	100	11 1/2	11 1/2	11 1/2	11 1/2
Boehack, H. C. . . . .	—	—	—	—	1 1/4
Do. Pfd. . . . .	—	—	—	—	19
Chick. Co. Oil. . . . .	400	10 1/2	10 1/2	10 1/2	10 1/2
Childs. Co. . . . .	4,500	2	1 1/2	1 1/2	2 1/2
Cudahy Pack. . . . .	700	11	10 1/2	11	10
Do. Pfd. . . . .	20	62	62	62	62
First Nat. Strs. . . . .	300	40 1/2	40	40 1/2	40
Gen. Foods . . . . .	1,500	41 1/2	40 1/2	41 1/2	40 1/2
Do. Pfd. . . . .	—	—	—	—	116
Glidden Co. . . . .	1,100	13 1/2	12 1/2	13 1/2	12 1/2
Do. Pfd. . . . .	—	—	—	—	40
Gobel Co. . . . .	500	2 1/2	2 1/2	2 1/2	2 1/2
Gr. A & P. . . . .	175	93	93	93	93
Do. Pfd. . . . .	—	—	—	—	128 1/2
Hormel, G. A. . . . .	150	32	32	32	34
Hygrade Food . . . . .	—	—	—	—	1 1/2
Kroger G & B. . . . .	2,200	30	30	30	29 1/2
Libby McNeill. . . . .	1,300	6 1/2	6 1/2	6 1/2	6 1/2
Mickelberry Co. . . . .	550	4 1/2	4 1/2	4 1/2	4 1/2
M. & H. Pfd. . . . .	280	6 1/2	6 1/2	6 1/2	5 1/2
Morell & Co. . . . .	200	35	35	35	35
Nat. Tea . . . . .	400	5	4 1/2	5	5
Proc. & Gamb. . . . .	1,800	60 1/2	60	60	62
Do. Pfd. . . . .	290	115	115	116	116
Rath Pack . . . . .	—	—	—	—	38 1/2
Safeway Strs. . . . .	2,000	44 1/2	43 1/2	43 1/2	43 1/2
Do. 5% Pfd. . . . .	720	106 1/2	106 1/2	106 1/2	105 1/2
Stahl Meyer . . . . .	—	—	—	—	1 1/4
Swift & Co. . . . .	4,950	18 1/2	18 1/2	18 1/2	18 1/2
Do. Int'l. . . . .	1,650	16 1/2	16 1/2	16 1/2	17
Truett Pork . . . . .	—	—	—	—	8 1/2
U. S. Leather. . . . .	100	6 1/2	6 1/2	6 1/2	4
Do. A . . . . .	100	7 1/2	7 1/2	7 1/2	6 1/2
Do. Pr. Pfd. . . . .	—	—	—	—	48
United Stk. Yds. . . . .	200	1 1/2	1 1/2	1 1/2	1 1/2
Do. Pfd. . . . .	100	6 1/2	6 1/2	6 1/2	6 1/2
Wesson Oil . . . . .	700	15 1/2	15 1/2	15 1/2	15 1/2
Do. Pfd. . . . .	100	59	59	59	58 1/2
Wilson & Co. . . . .	5,800	4 1/2	4 1/2	4 1/2	4
Do. Pfd. . . . .	300	56	56	56	54



## DEDICATED TO INDUSTRY PROGRESS

Not only the processing but also the "eatability" of meat products are worked out and checked in the new test kitchen of William J. Stange Co., Chicago. The kitchen helps the company maintain close control of the quality of its seasonings and curing ingredients. Packers and sausage manufacturers benefit from the research and tests carried on in it.

ABOVE.—Ellen Craig (left) domestic science expert, and Aladar Fonyo, chief chemist.

RIGHT.—Ellen Craig offers something new in pork sausage to (left to right) Aladar Fonyo, Frank Hartigan, Stange secretary-treasurer, and William B. Durling, president. Stange executives enjoy their testing responsibilities.



# NEW EQUIPMENT and Supplies

## IMPROVE BRINE TESTING SET

York Ice Machinery Corp. has announced the development of an improved brine testing set. Effort was directed toward improving accuracy and appearance of the set and enlarging its scope. Research was carried out with actual brine samples from plants all over the country so that all existing conditions could be taken into account. Improvements are:

- 1.—Development of sharper, more permanent color standards.
- 2.—Small convenient comparator block.
- 3.—Provision for specific gravity determinations.
- 4.—Addition of phenolphthalein for quick checks and to determine if samples out of the pH range of the set are acid or alkaline.
- 5.—More attractive and convenient carrying case.

The set utilizes the colorimetric method with universal indicator. There are 11 color standards covering a range of 5 to 10 pH in  $\frac{1}{2}$  pH increments. A new process is said to make the color standards less subject to fading than color standards in previous sets. Arrangement is provided for compensating colors in testing colored liquids such as dichromate treated brine. A funnel and filter paper help to clear up turbid brine.

Besides 11 color standards and bottle of indicator, there is a bottle of phenolphthalein; three test tubes; a minus 30 degs. to plus 120 degs F. test thermometer; a 1-in. x 6-in. glass cylinder and a hydrometer with a specific gravity range of 1.05 to 1.25 (which covers the range of calcium and salt brines). The set is offered for testing liquids within a range of 5 to 10 pH and increments of  $\frac{1}{2}$  pH unit, and for specific gravity determination between 1.05 and 1.25. No technical training is necessary in use of the set. Any person who can match colors can make accurate pH determinations.

Calcium and salt brines, being eutectic solutions, are conducive to electrolysis and may be responsible for considerable corrosion of refrigerating equipment with which they come in contact. This applies especially to galvanized and plated surfaces. However, it has been found that with proper control of brine pH and density, this corrosion can be reduced to an absolute minimum. This is the principal application of the York brine testing set.

Ever-growing use of cooling towers, spray ponds and evaporative condensers has brought another use for pH test sets. The condensing water in such installations absorbs dust and gases from the atmosphere and, in certain indus-

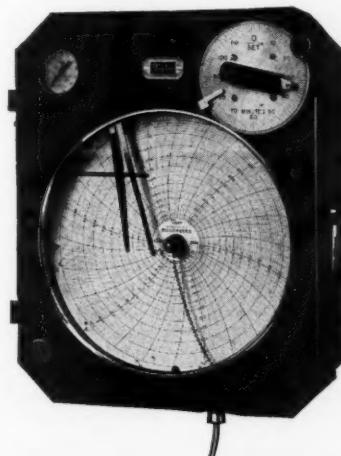
trial areas, this may cause the water to be highly corrosive. Recent study has revealed the possibility of lengthening the life of condenser tubes or condensing coils by controlling the pH of condensing water, either by addition of corrective chemicals, or replacement with fresh water. The York brine testing set is said to be suitable for all pH determinations in the refrigerating plant.

All parts of the set are securely held in place in an attractive wood carrying case. The case has a mahogany finish with dull nickel hardware.

## PROCESS TIMING MECHANISM

Exact duration of batch processing, as well as precise temperature or pressure control on such applications as canners' retorts, can now be assured with the new timing mechanism for Taylor Fulscope recording controllers, introduced by the Taylor Instrument Companies, Rochester, N. Y.

The device is said to be simple in



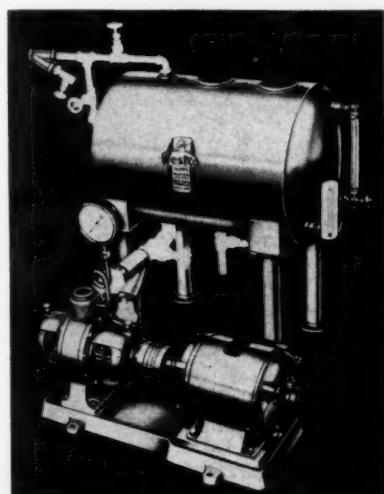
operation. The timing process is started manually by adjusting the instrument for the desired time period. Timing starts automatically when the apparatus reaches the set point of the controller. The time required to reach this set point makes no difference in the operation of the device. At the end of the desired period, the timing mechanism automatically terminates the process.

To facilitate timing successive batches, a "stop" is installed on the timing mechanism dial. When this stop is set at the desired timing period, the pointer can be moved quickly to this point and the starting operation speeded up to a corresponding ratio.

## BOILER FEED SYSTEMS

Planned especially for boilers up to 750 h.p. and 200 lbs. pressure, the new Wesco automatic boiler return systems are claimed to incorporate a number of features designed to reduce fuel consumption, cut labor costs and increase plant efficiency.

The systems are reported to return



## AUTOMATIC BOILER RETURN

This unit is designed for boilers up to 750 h.p. and 200 lbs. pressure.

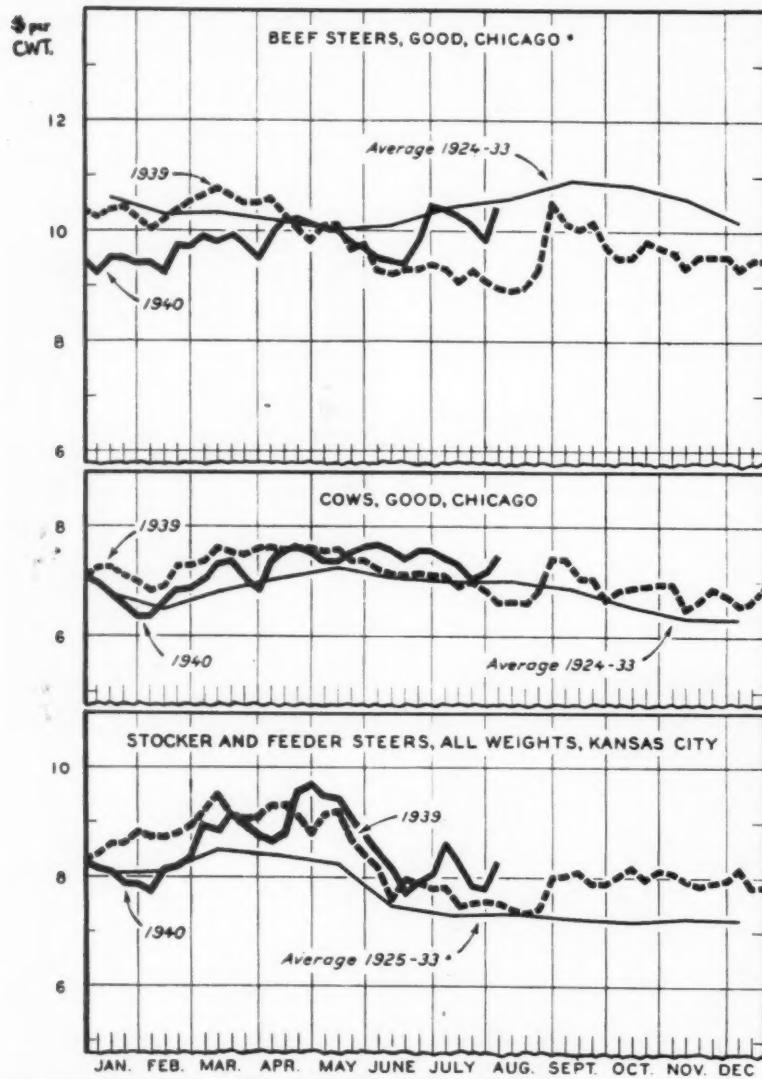
automatically all condensate to the boiler from both low and high pressure equipment, add make-up water as needed to compensate for loss of live steam, maintain a uniform water level in the boiler, keep return lines open constantly and eliminate back pressure on return lines.

Each combination is equipped with a Wesco turbine type pump with renewable liners and automatic boiler control. The control starts and stops the boiler feed pump to maintain the water level in the boiler within a  $\frac{1}{4}$ -in. range and cuts off the oil burner or stoker if the water in the boiler reaches a dangerously low level. It can also be wired to sound an alarm when the low water cut-off point is reached.

Control is fitted with a Monel metal float, has specially constructed bellows to eliminate packing and is constructed with all operating parts isolated from steam and hot water. Additional equipment includes receiver, stand, thermometer, gauge, make-up valve and strainers. Literature describing the Wesco boiler feed systems may be obtained by writing Micro-Westco, Inc., Bettendorf, Ia.

# LIVESTOCK MARKETS

*Weekly Review*



## Corn Crop Dwindling But Other Feeds Offset Loss

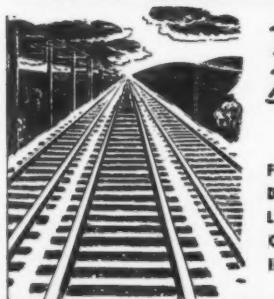
Corn crop prospects deteriorated greatly in July, as a result of hot, dry weather over most of the Corn Belt. Production of corn in 1940 was indicated on August 1 to be about 2,248 million bu. This is 371 million bu. less than the 1939 crop. Partly offsetting this decrease in corn production are indicated increases over last year of 185 million bu. in oats, 14 million bu. in barley, and 22 million bu. in grain sorghums. Total production of the four feed grains in 1940 is indicated to be about 91 million tons this year compared with 97 million tons last year.

Total supplies of feed grains for the 1940-41 feeding season (including July 1 stocks of oats, June 1 stocks of barley, prospective October 1 stocks of corn plus production of the four feed grains) are estimated to be about 113 million tons compared with the 1939-40 supply of 118 million tons. The number of feed grain-consuming livestock will be about 4 per cent less than the number last year. Thus, total supplies of feed grains per unit of livestock in 1940-41 will be about the same as in 1939-40. Excluding corn under loan, the supply of feed grains per livestock unit will be about 6 per cent smaller in 1940-41 than in 1939-40. Pasture and range conditions declined sharply in July and in most western regions ranged poor to fair.

## TRENDS IN CATTLE PRICES

Trend in prices of the better grades of slaughter steers was upward in the first half of 1940, in contrast to the decline from February to August in 1939. Prices of cows and the lower grades of steers declined in July, after having held fairly steady from April through June. Prices of stocker and feeder cattle have moved downward since early May. Chart by U. S. Bureau of Agricultural Economics.

**KENNETH-MURRAY**  
LIVESTOCK BUYING SERVICE



The Right Track to  
Buying at a Profit  
★

FORT WAYNE, IND. DETROIT, MICH.  
DAYTON, OHIO OMAHA, NEB. LOUISVILLE, KY.  
LAFAYETTE, IND. SIOUX CITY, IOWA  
CINCINNATI, OHIO NASHVILLE, TENN.  
INDIANAPOLIS, IND. MONTGOMERY, ALA.

**Order Buyer of Live Stock**  
**L. H. McMURRAY**

Indianapolis, Indiana

**FRANK R. JACKLE**  
Broker

Offerings Wanted of:  
Tallow, Blood, Bones, Cracklings, Hoofs  
405 Lexington Ave. New York City

## CORN BELT DIRECT TRADING

(Reported by U. S. Department of Agriculture, Agricultural Marketing Service.)

Des Moines, Ia., August 29, 1940.—At 16 concentration points and 10 packing plants in Iowa and Minnesota general trade undertone was strong most of week and prices advanced 15@35c over last week's close, with the majority 20@30c up. Light weight butchers made the least upturn.

### Hogs, good to choice

160-180 lb.	.....	\$ 6.20 @ 6.80
180-200 lb.	.....	6.65 @ 7.15
200-240 lb.	.....	6.95 @ 7.10
240-270 lb.	.....	6.55 @ 6.95
270-300 lb.	.....	6.30 @ 6.65
300-330 lb.	.....	6.00 @ 6.40
330-360 lb.	.....	5.75 @ 6.15

### Sows

330 lbs. down	.....	5.90 @ 6.05
330-400 lb.	.....	5.35 @ 5.90
400-500 lb.	.....	5.00 @ 5.65

Receipts of hogs at Corn Belt markets for week ended with Aug. 29, 1940:

	This week	Last week
Friday, Aug. 28	19,900	17,900
Saturday, Aug. 29	21,000	18,000
Monday, Aug. 26	27,000	26,100
Tuesday, Aug. 27	13,900	17,200
Wednesday, Aug. 28	16,500	13,500
Thursday, Aug. 29	31,800	12,400

## NEW YORK LIVESTOCK

Livestock prices at New York, Wednesday, August 28, 1940, as reported by U. S. Agricultural Marketing Service.

### CATTLE:

Steers, medium and good	.....	\$ 11.50
Cows, medium	.....	7.25 @ 7.50
Cows, cutter and common	.....	5.00 @ 6.00
Bulls, good	.....	7.25 @ 7.75
Bulls, medium	.....	6.50 @ 7.00

### CALVES:

Vealers, good and choice, 160-192-lb.	\$ 11.00 @ 13.00
Vealers, common and medium	8.00 @ 9.50
Culls	5.00 @ 7.00

### HOGS:

Hogs, good and choice, 180-195-lb.	\$ 7.80
Hogs, 155-240-lb.	7.40 @ 7.70
Hogs, 410-470-lb.	4.75 @ 5.75
Packing sows	5.00 @ 5.50

### LAMBS:

Lambs, spring, good, 75-lb.	.....	\$ 11.00
Lambs, medium, 71-lb.	.....	9.00

Receipts of salable livestock at Jersey City public market for the week ended with August 22:

	Cattle	Calves	Hogs*	Sheep
Salable receipts	2,415	2,092	443	2,425
Total, with directs	7,087	16,177	20,808	44,235
Previous week:				
Salable receipts	1,854	906	411	4,287
Total, with directs	6,328	10,467	18,691	54,163

\*Including hogs at 41st street.

## SOUTHEASTERN LIVESTOCK

Combined receipts of livestock, as reported by the Agricultural Marketing Service, at seven Southern packing plants, for four days ended August 22:

	Cattle	Calves	Hogs
Four days ended Aug. 22	900	679	3,605
Previous week	644	298	3,227
Same period 1939	897	204	3,490

Receipts of salable livestock at the seven plants for week ended August 26:

No.	Pct.
Local receipts (from within states of Georgia, Florida and Alabama)	1,667
In-shipments (from outside Georgia, Florida and Alabama)	3,057
Total	4,724

## LIVESTOCK PRICES AT LEADING MARKETS

Livestock prices at five leading Western markets, Thursday, August 29, 1940, as reported by U. S. Department of Agriculture, Agricultural Marketing Service:

Hogs (soft & oily not quoted): CHICAGO NAT. STK. YDS. OMAHA KANS. CITY ST. PAUL

### BARROWS AND GILTS:

Good-choice:						
120-140 lbs.	.....	\$ 5.40 @ 6.15	\$ 5.65 @ 6.35	\$ 5.75 @ 6.60	\$ 5.25 @ 5.85	\$ 5.25 @ 5.80
140-160 lbs.	.....	5.90 @ 6.80	6.15 @ 6.85	5.75 @ 6.90	6.25 @ 7.00	5.50 @ 6.40
160-180 lbs.	.....	6.50 @ 7.35	6.65 @ 7.30	6.40 @ 6.90	6.25 @ 7.00	6.25 @ 6.85
180-200 lbs.	.....	7.05 @ 7.55	7.20 @ 7.40	6.75 @ 7.00	6.80 @ 7.05	6.80 @ 7.00
200-220 lbs.	.....	7.50 @ 7.55	7.30 @ 7.40	6.85 @ 7.00	6.90 @ 7.10	6.90 @ 7.00
220-240 lbs.	.....	7.30 @ 7.55	7.40 @ 7.40	6.85 @ 7.00	6.90 @ 7.10	6.80 @ 7.00
240-270 lbs.	.....	7.10 @ 7.50	7.15 @ 7.40	6.90 @ 7.00	6.75 @ 7.35	6.75 @ 6.85
270-330 lbs.	.....	6.70 @ 7.20	6.80 @ 7.25	6.35 @ 6.75	6.15 @ 6.90	6.20 @ 6.40
300-330 lbs.	.....	6.50 @ 6.85	6.63 @ 6.95	6.25 @ 6.45	6.35 @ 6.60	6.00 @ 6.25
330-360 lbs.	.....	6.20 @ 6.70	6.35 @ 6.80	6.00 @ 6.25	6.25 @ 6.45	5.75 @ 6.03

### Medium:

160-220 lbs.	.....	6.25 @ 7.25	6.25 @ 7.10	5.90 @ 6.75	5.50 @ 6.90	6.15 @ 6.90
--------------	-------	-------------	-------------	-------------	-------------	-------------

### SOWS:

Good and choice:						
270-300 lbs.	.....	6.25 @ 6.50	6.40 @ 6.50	6.00 @ 6.10	5.90 @ 6.10	5.75 @ 5.85
300-330 lbs.	.....	6.15 @ 6.40	6.25 @ 6.45	5.90 @ 6.05	5.90 @ 6.10	5.75 @ 5.85
330-360 lbs.	.....	6.00 @ 6.25	5.90 @ 6.30	5.70 @ 6.00	5.75 @ 6.00	5.65 @ 5.80

### Good:

360-400 lbs.	.....	5.65 @ 6.10	5.75 @ 6.05	5.50 @ 5.85	5.65 @ 5.90	5.55 @ 5.70
400-450 lbs.	.....	5.50 @ 5.80	5.60 @ 5.90	5.40 @ 5.65	5.50 @ 5.75	5.40 @ 5.60
450-500 lbs.	.....	5.25 @ 5.65	5.40 @ 5.70	5.25 @ 5.30	5.25 @ 5.65	5.40 @ 5.50

### Medium:

250-300 lbs.	.....	4.85 @ 5.85	5.10 @ 5.75	5.00 @ 5.75	5.15 @ 6.00	5.25 @ 5.75
--------------	-------	-------------	-------------	-------------	-------------	-------------

### PIGS (Slaughter):

Med. & good, 90-120 lbs.	4.75 @ 5.65	5.15 @ 5.85	.....	.....	.....	.....
--------------------------	-------------	-------------	-------	-------	-------	-------

### Slaughter Cattle, Vealers and Calves:

STEERS, choice:						
-----------------	--	--	--	--	--	--

750-900 lbs.	.....	11.50 @ 12.75	11.00 @ 12.25	10.75 @ 12.25	10.75 @ 12.25	11.00 @ 11.75
900-1100 lbs.	.....	11.50 @ 12.75	11.00 @ 12.25	11.00 @ 12.25	11.00 @ 12.25	11.25 @ 12.25
1100-1300 lbs.	.....	12.25 @ 13.00	11.00 @ 12.50	11.00 @ 12.50	11.25 @ 12.25	11.25 @ 12.25
1300-1500 lbs.	.....	12.25 @ 13.00	11.00 @ 12.50	11.00 @ 12.50	11.00 @ 12.50	11.00 @ 12.00

STEERS, good:						
---------------	--	--	--	--	--	--

750-900 lbs.	.....	10.25 @ 11.50	9.75 @ 11.00	10.00 @ 11.00	9.50 @ 11.00	10.25 @ 11.00
900-1100 lbs.	.....	10.25 @ 11.50	9.75 @ 11.00	10.00 @ 11.00	9.75 @ 11.25	10.50 @ 11.25
1100-1300 lbs.	.....	10.50 @ 12.25	10.00 @ 11.00	10.00 @ 11.00	9.75 @ 11.25	10.50 @ 11.25
1300-1500 lbs.	.....	10.75 @ 12.25	10.00 @ 11.00	10.00 @ 11.00	9.75 @ 11.25	10.00 @ 11.00

STEERS, medium:						
-----------------	--	--	--	--	--	--

750-1100 lbs.	.....	8.25 @ 10.25	7.50 @ 9.75	8.00 @ 10.00	7.50 @ 9.75	8.75 @ 10.50
1100-1300 lbs.	.....	8.25 @ 10.50	7.50 @ 9.50	8.00 @ 10.00	7.50 @ 9.50	8.25 @ 9.25

STEERS, common:						
-----------------	--	--	--	--	--	--

750-1100 lbs.	.....	7.00 @ 8.25	6.50 @ 7.50	6.75 @ 8.00	6.50 @ 7.75	6.50 @ 8.75
---------------	-------	-------------	-------------	-------------	-------------	-------------

STEERS, choice:						
-----------------	--	--	--	--	--	--

Good and choice	.....	11.00 @ 12.25	9.75 @ 11.00	9.00
-----------------	-------	---------------	--------------	------

## PACKERS' PURCHASES

Purchases of livestock by packers at principal centers for the week ending Saturday, August 24, 1940, as reported to The National Provisioner:

### CHICAGO

Armour and Company, 2,837 hogs; Swift & Company, 1,392 hogs; Wilson & Co., 6,510 hogs; Western Packing Co., Inc., 1,977 hogs; Agar Packing Co., 6,231 hogs; Shippers, 9,785 hogs; Others, 25,971 hogs.

Total: 36,058 cattle; 3,972 calves; 54,703 hogs; 15,910 sheep.

### KANSAS CITY

	Cattle	Calves	Hogs	Sheep
Armour and Company	2,965	704	4,144	4,057
Cudahy Pkg. Co.	1,696	618	1,974	2,916
Swift & Company	1,932	520	2,655	2,849
Wilson & Co.	1,743	439	2,254	2,834
Indep. Pkg. Co.	.....	.....	275	.....
Kornblum Pkg. Co.	1,226	.....	.....	.....
Others	8,391	740	3,505	480
<b>Total</b>	<b>17,973</b>	<b>3,021</b>	<b>14,807</b>	<b>13,136</b>

### OMAHA

	Cattle	Calves	Hogs	Sheep
Armour and Company	4,729	5247	4,880	.....
Cudahy Pkg. Co.	3,690	3,146	4,888	.....
Swift & Company	3,626	3,218	4,115	.....
Wilson & Co.	1,435	3,050	1,521	.....
Others	7,548	.....	.....	.....

Cattle and calves: Eagle Pkg. Co., 15; Greater Omaha Pkg. Co., 136; Geo. Hoffmann, 39; Lewis Pkg. Co., 853; Nebraska Beef Co., 791; Omaha Pkg. Co., 237; John Roth, 157; South Omaha Pkg. Co., 469; Lincoln Pkg. Co., 269.

Total: 16,446 cattle and calves; 22,209 hogs; 15,404 sheep.

### EAST ST. LOUIS

	Cattle	Calves	Hogs	Sheep
Armour and Company	2,448	1,939	4,685	4,311
Swift & Company	2,786	2,281	2,848	3,464
Hunter Pkg. Co.	1,191	76	2,457	975
Heil Pkg. Co.	.....	.....	1,878	.....
Krey Pkg. Co.	.....	.....	3,660	.....
Laclede Pkg. Co.	.....	.....	1,773	.....
Sieloff Pkg. Co.	.....	.....	557	.....
Shippers	6,122	2,370	20,187	768
Others	4,890	1,143	7,405	2,706
<b>Total</b>	<b>17,437</b>	<b>7,800</b>	<b>45,450</b>	<b>12,222</b>

### ST. JOSEPH

	Cattle	Calves	Hogs	Sheep
Swift & Company	1,815	479	7,428	9,939
Armour and Company	2,063	594	6,460	4,668
Others	2,392	152	1,087	2,427

Total: 6,270 1,225 14,975 17,034

Not including 896 hogs bought direct.

### SIOUX CITY

	Cattle	Calves	Hogs	Sheep
Cudahy Pkg. Co.	2,128	83	4,049	2,844
Armour and Company	1,701	41	4,197	1,666
Swift & Company	1,520	50	2,570	1,628
Shippers	3,640	64	6,649	364
Others	332	5	60	.....
<b>Total</b>	<b>9,327</b>	<b>243</b>	<b>17,425</b>	<b>6,502</b>

### OKLAHOMA CITY

	Cattle	Calves	Hogs	Sheep
Armour and Company	2,265	1,322	2,572	1,037
Wilson & Company	2,071	1,325	2,670	1,039
Others	201	27	949	.....

Total: 4,537 2,677 6,191 2,076

Not including 21 cattle and 1,863 hogs bought direct.

### WICHITA

	Cattle	Calves	Hogs	Sheep
Cudahy Pkg. Co.	1,841	858	5,047	1,847
Dold Pkg. Co.	659	60	602	9
Wichita D. B. Co.	15	.....	127	.....
Dunn-OsterTag	62	.....	127	.....
Fred W. Dold	120	.....	363	.....
Sunflower Pkg. Co.	54	.....	244	1
Pioneer Pkg. Co.	26	.....	.....	.....

Total: 2,777 924 6,383 1,857

Not including 33 cattle and 2,404 hogs bought direct.

### DENVER

	Cattle	Calves	Hogs	Sheep
Armour and Company	790	141	1,995	10,496
Swift & Company	783	152	1,834	10,884
Cudahy Pkg. Co.	608	121	1,109	2,751
Others	2,063	211	1,480	18,011

Total: 4,244 625 6,418 42,142

### ST. PAUL

	Cattle	Calves	Hogs	Sheep
Armour and Company	2,150	1,497	8,789	4,237
Rifkin Pkg. Co.	813	31	.....	.....
Swift & Company	4,574	2,626	10,300	7,909
United Pkg. Co.	2,103	188	.....	.....
Cudahy Pkg. Co.	779	1,002	.....	.....
Others	2,163	893	.....	.....

Total: 12,587 6,237 19,098 12,146

## FORT WORTH

	Cattle	Calves	Hogs	Sheep
Armour and Company	1,847	1,123	2,739	2,141
Swift & Company	1,854	1,282	2,138	2,495
Blue Bonnet Pkg. Co.	230	74	518	26
City Pkg. Co.	167	28	503	.....
Rosenthal Pkg. Co.	30	6	29	.....

Total: 4,148 2,513 5,927 4,662

## INDIANAPOLIS

	Cattle	Calves	Hogs	Sheep
Kingan & Company	1,805	629	18,365	3,993
Armour and Company	908	150	1,865	.....
Hilgemeter Bros.	10	.....	950	.....
Stumpf Bros.	.....	.....	125	.....
Meier Pkg. Co.	9	.....	368	.....
St. Joseph & Vazel.	120	53	44	59
Wabnitz & Deters.	67	.....	39	.....
Maas-Hartman Co.	39	8	.....	.....
Shipers	3,044	2,242	20,843	5,115
Others	1,240	146	294	552

Total: 7,250 3,274 38,850 9,719

## CINCINNATI

	Cattle	Calves	Hogs	Sheep
S. W. Gall's Sons	.....	11	464	.....
E. Kahn's Sons Co.	825	126	9,740	5,641
Lohrey Packing Co.	2	.....	355	.....
H. H. Meyer Pkg. Co.	14	.....	4,294	.....
J. Schlaeter	166	173	.....	82
J. & F. Schroter P. Co.	14	.....	3,013	.....
J. F. Stegner Co.	410	417	.....	23
Shipers	480	.....	2,793	2,850
Others	1,893	738	808	190

Total: 3,804 1,463 21,003 9,250

Not including 1,551 cattle, 12 calves, 7,028 hogs and 493 sheep bought direct.

## RECAPITULATION†

### CATTLE

	Week ended	Prev. week,	Cor. week,
	Aug. 24	Aug. 19	Aug. 1939
Chicago	36,058	34,159	31,540
Kansas City	7,973	18,571	15,400
Omaha*	16,446	14,930	15,849
East St. Louis	17,437	15,592	16,507
St. Joseph	6,270	5,374	6,446
Sioux City	9,327	11,022	8,795
Oklahoma City	4,537	3,552	4,396
Wichita	2,777	2,300	2,429
Denver	4,244	4,008	3,939
St. Paul	12,587	11,977	11,375
Milwaukee	3,641	3,217	3,306
Indianapolis	7,250	8,376	5,882
Cincinnati	3,504	2,383	3,083
Ft. Worth	4,148	4,149	4,267

Total: 146,496 139,610 134,604

### HOSES

Chicago	54,703	54,889	46,013
Kansas City	14,807	10,689	7,994
Omaha	22,209	23,203	21,806
East St. Louis	45,450	43,308	44,484
St. Joseph	14,975	14,142	8,728
Sioux City	17,423	17,762	16,040
Oklahoma City	6,191	6,001	6,273
Wichita	6,383	5,057	4,076
Denver	6,418	5,882	5,244
St. Paul	19,098	22,068	19,600
Milwaukee	4,914	4,577	6,686
Indianapolis	88,850	41,979	35,888
Cincinnati	21,063	18,921	19,684
Ft. Worth	5,927	5,689	4,237

Total: 278,353 274,188 246,753

### SHEEP

Chicago	15,910	16,262	33,082
Kansas City	13,136	14,407	10,514
Omaha	15,404	18,571	18,207
East St. Louis	12,222	13,556	15,098
St. Joseph	17,034	13,078	12,997
Sioux City	6,502	8,616	7,377
Oklahoma City	2,076	2,599	1,245
Wichita	1,857	2,751	1,157
Denver	12,142	43,099	45,085
St. Paul	12,146	14,531	16,780
Milwaukee	1,403	1,349	1,495
Indianapolis	8,719	10,551	8,241
Uncinat	9,250	10,118	5,822
Ft. Worth	4,662	6,905	6,439

Total: 163,463 176,293 183,089

\*Cattle and calves. †Not including directs.

## CHICAGO LIVESTOCK

Statistics of livestock at the Chicago Union Stock Yards for current and comparative periods.

### RECEIPTS

	Cattle	Calves	Hogs	Sheep
Mon., Aug. 19	14,505	1,325	15,806	6,747
Tues., Aug. 20	6,974	1,250	17,283	3,570
Wed., Aug. 21	9,069	741	12,108	5,744
Thur., Aug. 22	4,676	912	12,507	5,835
Fri., Aug. 23	5,894	602	11,726	5,732
Sat., Aug. 24	800	.....	5,000	5,000

\*Total this week.

†Previous week.

Year ago.

Two years ago.

### SHIPMENTS

	Cattle	Calves	Hogs	Sheep
Mon., Aug. 19	3,524	103	3,536	467
Tues., Aug. 20	2,396	229	1,400	961
Wed., Aug. 21	3,228	117	866	840
Thur., Aug. 22	1,986	18	1,836	532
Fri., Aug. 23	568	27	1,956	627
Sat., Aug. 24	100	.....	100	100

\*Including 506 cattle, 1,017 calves, 19,281 hogs and 12,641 sheep direct to persons from other points.

†All receipts include directs.

### AUGUST AND YEAR RECEIPTS

Receipts thus far this month and year to date with comparisons:

### —August—

### 1940

	1940	1939	1940	1939
Cattle	112,566	123,817	113,232	113,394
Calves	14,006	18,097	16,284	20,941
Hogs	250,208	224,807	337,999	256,701
Sheep	90,683	134,674	1,401,827	1,688,109

### —Year—

### 1939

	1940	1939	1940	1939
Cattle	112,232	123,817	113,232	113,394
Calves	14,006	18,097	16,284	20,941
Hogs	250,208	224,807	337,999	256,701
Sheep	90,683	134,674	1,401,827	1,688,109

WEEKLY AVERAGE PRICE OF LIVESTOCK

	Cattle	Hogs	Sheep	Lambs
Week ended Aug. 24.	\$10.50	\$6.30	\$3.25	\$0.35
Previous week	10.60	6.15	3.00	0.35
1939	21.806	15.849	15.549	1.729
1938	23.485	18.967	17.908	1.516
1937	21.712	16.238	15.700	1.498
1936	26.665	21.997	20.927	1.479
1935	26.655	20.262	18.115	1.125
1934	26.397	20.262	18.115	1.125
1933	26.039	20.267	18.115	1.125
1932	26.039	20.267	18.115	1.125
1931	26.039	20.267	18.115	1.125
1930	26.039	20.267	18.115	1.125
1929	26.039	20.267	18.115	1.125
1928	26.039	20.26		

## SLAUGHTER REPORTS

Special reports to THE NATIONAL PROVISIONER show the number of livestock slaughtered at 18 centers for the week ended August 24, 1940.

### CATTLE

	Week ended Aug. 24	Prev. week	Cor. week, 1939
Chicago	22,429	21,697	29,540
Kansas City	20,994	21,323	19,058
Omaha*	17,921	16,228	15,251
East St. Louis	11,315	9,695	10,015
St. Joseph	5,806	5,405	5,272
Saint Paul	5,913	6,866	6,554
Wichita	3,324	3,424	3,483
Fort Worth	1,695	1,750	1,267
Philadelphia	1,946	1,784	1,409
Indianapolis	2,030	2,224	1,388
New York & Jersey City	9,361	8,229	7,614
Oklahoma City*	7,235	5,822	6,247
Cincinnati	4,722	3,908	2,683
Denver	4,098	4,156	4,413
St. Paul	9,645	11,977	9,392
Milwaukee	3,589	3,087	3,237
Total	137,449	133,196	129,573

\*Cattle and calves. †Not including directs.

### HOGS

Chicago	72,928	71,216	70,187
Kansas City	33,508	25,336	19,649
Omaha	22,241	22,229	17,249
East St. Louis	48,986	49,264	41,097
St. Joseph	14,958	13,782	7,420
Saint Paul	13,703	10,388	9,443
Wichita	8,187	8,187	5,131
Fort Worth	1,987	5,688	4,237
Philadelphia	20,127	13,632	16,405
Indianapolis	14,765	14,379	13,922
New York & Jersey City	41,257	35,617	42,316
Oklahoma City	8,054	7,492	7,398
Cincinnati	18,585	16,180	16,439
Denver	6,386	6,122	4,739
St. Paul	19,098	22,068	19,600
Milwaukee	4,911	4,559	6,662
Total	354,223	325,095	301,964

\*Includes National Stock Yards, East St. Louis, Ill., and St. Louis, Mo.

### SHEEP

Chicago	11,211	13,467	47,409
Kansas City	13,136	14,407	10,514
Omaha	19,904	21,326	19,507
East St. Louis	11,456	12,923	10,615
St. Joseph	14,607	12,088	11,290
Saint Paul	7,110	9,136	6,938
Wichita	1,887	2,551	1,290
Fort Worth	4,662	6,505	6,449
Philadelphia	4,148	4,234	3,369
Indianapolis	4,498	4,432	3,377
New York & Jersey City	57,186	73,354	47,604
Oklahoma City	2,076	2,599	1,245
Cincinnati	7,228	10,089	5,297
Denver	7,199	7,833	9,613
St. Paul	12,146	14,531	16,780
Milwaukee	1,363	1,349	1,337
Total	179,787	211,020	203,564

†Not including directs.

## RECEIPTS AT CHIEF CENTERS

Receipts for week ended August 24 were as follows:

At 20 markets:	Cattle	Hogs	Sheep
Week ended Aug. 24	220,000	322,000	261,000
Previous week	260,000	306,000	254,000
1939	201,000	298,000	322,000
1938	226,000	288,000	375,000
1937	225,000	240,000	374,000

At 11 markets:	Cattle	Hogs	Sheep
Week ended Aug. 24	265,000	300,000	264,000
Previous week	242,000	300,000	244,000
1939	244,000	300,000	242,000
1938	191,000	214,000	229,000
1937	191,000	214,000	229,000

At 7 markets:	Cattle	Hogs	Sheep
Week ended Aug. 24	167,000	218,000	163,000
Previous week	151,000	214,000	160,000
1939	148,000	199,000	207,000
1938	163,000	186,000	217,000
1937	164,000	152,000	241,000
1936	205,000	188,000	224,000

## CHAIN STORE SALES

Chain grocery store sales for July were approximately 12 per cent above sales in the same period last year, the U. S. Department of Commerce reports. This was about the same relative gain as was made during the first six months of this year over the corresponding period of 1939.

## MEAT SUPPLIES AT EASTERN MARKETS

(Reported by the U. S. Department of Agriculture, Agricultural Marketing Service)

### WESTERN DRESSED MEATS

	NEW YORK	PHILA.	BOSTON
STEERS, carcass	Week end August 24, 1940.....	9,917	2,217
	Week previous .....	10,128	2,120
	Same week year ago.....	9,628	2,567
COWS, carcass	Week ending August 24, 1940.....	1,113	973
	Week previous .....	877	998
	Same week year ago.....	733	994
BULLS, carcass	Week ending August 24, 1940.....	386	872
	Week previous .....	481	967
	Same week year ago.....	527	655
VEAL, carcass	Week ending August 24, 1940.....	7,655	1,245
	Week previous .....	10,352	896
	Same week year ago.....	7,050	805
LAMB, carcass	Week ending August 24, 1940.....	42,135	11,881
	Week previous .....	41,136	9,391
	Same week year ago.....	47,459	13,470
MUTTON, carcass	Week ending August 24, 1940.....	2,065	346
	Week previous .....	1,626	197
	Same week year ago.....	1,720	240
PORK CUTS, lbs.	Week ending August 24, 1940.....	1,978,911	276,659
	Week previous .....	2,258,536	198,860
	Same week year ago.....	1,493,033	181,533
BEEF CUTS, lbs.	Week ending August 24, 1940.....	397,966	.....
	Week previous .....	497,819	.....
	Same week year ago.....	449,167	.....

### LOCAL SLAUGHTERS

Week ending August 24, 1940.....	9,361	1,946	.....
Week previous .....	8,229	1,784	.....
Same week year ago.....	7,614	1,409	.....
CATTLE, head	Week ending August 24, 1940.....	18,066	2,871
	Week previous .....	14,238	2,573
	Same week year ago.....	14,727	2,341
HOGS, head	Week ending August 24, 1940.....	41,257	20,127
	Week previous .....	34,603	13,632
	Same week year ago.....	42,316	16,405
SHEEP, head	Week ending August 24, 1940.....	57,186	4,148
	Week previous .....	73,354	4,234
	Same week year ago.....	47,604	3,369

Country dressed product at New York totaled 1,750 veal, 1 hog and 14 lambs. Previous week 2,179 veal, 6 hogs and 6 lambs in addition to that shown above.

## WEEKLY INSPECTED KILL

Hog slaughter at 27 centers during the four weeks ended August 23 was smaller than in any similar period since September, 1939. Four weeks' hog slaughter totaled 1,911,540 head compared with 2,209,369 head in the preceding four weeks, and 1,816,320 head in the corresponding period in 1939.

Number of animals processed in 27 centers for week ended August 23:

	Cattle	Calves	Hogs	Sheep
New York Area <sup>1</sup>	9,355	17,888	39,980	58,834
Phila. & Balt. <sup>2</sup>	3,829	1,451	33,153	3,393
Ohio-Indiana <sup>3</sup>	9,970	8,531	47,118	12,230
Chicago <sup>4</sup>	25,498	6,988	72,928	34,534
St. Louis Area <sup>5</sup>	12,710	11,382	41,124	11,230
K. City <sup>6</sup>	1,801	6,154	33,509	11,845
Southwest Group <sup>7</sup>	14,224	8,066	84,772	17,665
Omaha	14,822	1,202	22,241	19,410
Sioux City <sup>8</sup>	5,897	224	18,705	7,358
St. Paul-Wisc. <sup>9</sup>	19,342	12,418	52,543	16,444
Interior Iowa & So. Minn. <sup>10</sup>	15,497	4,466	100,728	43,873
Total	142,616	74,007	499,662	250,871
Total Prev. week	135,305	66,421	483,655	290,627
Total last year	132,750	64,328	434,270	338,273

<sup>1</sup>Includes New York City, Newark, and Jersey City. <sup>2</sup>Includes Cincinnati and Cleveland, Ohio, and Indianapolis, Ind. <sup>3</sup>Includes National Stockyard and East St. Louis, Ill., and St. Louis, Mo. <sup>4</sup>Includes So. St. Joseph, Wichita, Oklahoma City, and Ft. Worth. <sup>5</sup>Includes St. Paul, Minn., Madison, and Milwaukee, Wis. <sup>6</sup>Includes Albert Lea and Austin, Minn., and Cedar Rapids, Des Moines, Ft. Dodge, Mason City, Marshalltown, Ottumwa, Storm Lake, and Waterloo, Iowa.

Packing plants included in the above tabulation slaughtered during the calendar year 1939 approximately 74% of the cattle, calves and hogs, and 82% of the sheep and lambs that were slaughtered under Federal inspection that year.

## CANADIAN LIVESTOCK PRICES

	STEERS	VEAL CALVES
Toronto	\$ 8.75	\$ 8.75
Montreal	8.25	8.50
Winnipeg	8.50	8.50
Calgary	8.00	8.25
Edmonton	7.75	7.75
Prince Albert	6.75	6.75
Moose Jaw	6.50	7.00
Saskatoon	7.10	6.75
Regina	7.50	7.00
Vancouver	8.00	8.00

	BACON HOGS	GOOD LAMBS
Toronto	\$ 9.00	\$ 10.95
Montreal	8.50	10.00
Winnipeg	8.00	8.50
Calgary	8.25	8.50
Edmonton	8.00	8.00
Prince Albert	7.75	7.75
Moose Jaw	7.50	7.00
Saskatoon	7.25	7.00
Regina	7.50	7.25
Vancouver	9.00	9.00

\*Montreal and Winnipeg hogs sold on a "f. & w." basis; all others "off trucks."

# CLASSIFIED ADVERTISEMENTS

Advertisements on this page, 10c per word per insertion, minimum charge \$2.00. Position wanted, special rate 7c per word, minimum charge \$1.40. Count address or box number as four words. Headline 70c extra.

## Position Wanted

**SAUSAGE CASING MAN**—experienced supervisor—capable of taking complete charge, grading and shipping floor. Go anywhere. Box W-994, THE NATIONAL PROVISIONER, 300 Madison Ave., New York, N. Y.

**BEEF MAN**—18 years' experience in beef department management, both car route and carload. West, Mid-West or South preferred. Proven results and A-1 references from present employer. Box W-993, THE NATIONAL PROVISIONER, 407 So. Dearborn St., Chicago, Ill.

**YOUNG MAN**—17 years' packinghouse experience, desires change. Experience covers sales management, purchasing, financing, office and branch house management. Have been general manager of large house. Extremely aggressive, with modern up-to-date ideas. At present employed as comptroller of large concern. Have had exceptional experience in refinancing and personnel problems. College graduate in accounting. Open to offers in any locality. Box W-995, THE NATIONAL PROVISIONER, 407 So. Dearborn St., Chicago, Ill.

**WORKING FOREMAN**—20 years' practical experience in all departments. Knows best methods and formulas for sausages, meat loaves, specialties, etc. Also ham making and curing. Wishes position with middle-sized New York or New Jersey packer. Excellent references. Box W-996, THE NATIONAL PROVISIONER, 300 Madison Ave., New York, N. Y.

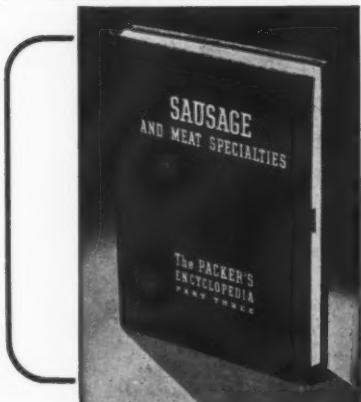
**CASING FOREMAN**—long years experience beef, sheep, hog casings, also fresh hog casings cleaning system, wants position. Box W-997, THE NATIONAL PROVISIONER, 300 Madison Ave., New York, N. Y.

**HAVE YOU NEED** for a successful sausage expert and foreman? Has a wealth of experience in all phases of the sausage industry and cost finding. Box W-958, THE NATIONAL PROVISIONER, 407 So. Dearborn St., Chicago, Ill.

## Miscellaneous

### Cracklings Wanted We Pay High Prices

All kinds hard or soft pressed, or unpressed straight from cooker. Also bones, both in small or large lots. From Michigan, Ohio, Indiana, Illinois, Missouri, Kansas, Colorado, Nebraska, Dakotas, Minnesota, Iowa, Wisconsin, Oklahoma, Arkansas, Texas. Write for particulars. Hill Packing Co., Madison St., Topeka, Kansas.



## Business Opportunities

**PACKING PLANT FOR SALE**—fully equipped brick plant located just east of city; plant now operating; sausage room, coolers, five acres land. Write Roy F. Godfrey, 1603 Philtower Bldg., Tulsa, Oklahoma.

**FOR SALE: MEAT** market and small, complete sausage kitchen. Kansas City, Mo. Owner forced to give up business due to sickness. Good opportunity to obtain nice, clean, established place. Very little money required. Address Box W-999, THE NATIONAL PROVISIONER, 407 So. Dearborn St., Chicago, Ill.

**FOR SALE: NEW** packing plant, well equipped, all new machinery. Doing big business. Box W-1, THE NATIONAL PROVISIONER, 407 So. Dearborn St., Chicago, Ill.

**PARTNER-SALESMAN** with ambition and capital \$3,000, to invest in Wisconsin Sausage Factory, established 20 years. Capable of taking charge of sales. Box W-2, THE NATIONAL PROVISIONER, 407 So. Dearborn St., Chicago, Ill.

## Men Wanted

**SALESMAN** calling on sausagemakers and meat packers wanted for responsible casinghouse. State experience, references. Write Box W-998, THE NATIONAL PROVISIONER, 407 So. Dearborn St., Chicago, Ill.

## SELL or BUY

## LOCATE a JOB

## FILL an OPENING

**All can be accomplished**  
through the classified columns of

## THE NATIONAL PROVISIONER

No matter what your message is, it will reach the entire packing industry in these columns. Be sure your wants come to the attention of enough people. Send in your classified ad today.

## Equipment for Sale

### Meat Packing Equipment Offerings

- 10—Aluminum St. Jack. Kettles, 40, 60, 80, 100 gal.
- 1—Meakin horiz. continuous Cracking Press, with tempering apparatus, 30 h.p. Motor, 800 to 1000 lb. cap. per hour
- 5—9"x19" Revolving Digesters or Percolators. 4000 Ft. Drag, Scraper and Screw Conveyor.
- 10—Bartlett & Snow vertical Tankage Dryers
- 25—Dopp Kettles, all sizes
- 10—Hammer Mills, Crushers, Grinders, Pulverizers
- 4—Ice Breakers and Crushers
- 2—Brecht 200 lb. Stuffers, without tubes.
- 1—Brecht Enterprise No. 156 Meat Grinder.
- 1—Brecht 1000-lb. Meat Mixer.
- 1—Brecht 18" Filter Press
- 1—Hand Operated Fat Cutter

Ask for "Consolidated News," listing our large stock. Send us your inquiries—we desire to serve you. What have you for sale? We buy from a single item to a complete plant.

CONSOLIDATED PRODUCTS CO. INC.  
14-19 Park Row, New York City, N. Y.

## The Bunn Tying Machine

is used very generally by packers for tying sausage boxes, bacon squares, picnics, butts, etc. Ties 20-30 packages per minute. Saves twine. Write for our 10-day free trial offer. B. H. Bunn Co., 7609 Vincennes Ave., Chicago, Ill.

## Hydraulic Press

1—Dunning & Boschert 500-ton press, complete with pump and fittings, good condition, \$1100. Green Bay Soap Co., Green Bay, Wis.

## Reconstructed Machinery

- 43-T Self-Emptying Silent Cutter
- 43-B Silent Cutter and Motor
- 38-B Silent Cutter and Motor
- 32-B Silent Cutter and Motor
- 1500-lb. Mixer and Motor
- 1000-lb. Mixer and Motor
- 700-lb. Mixer and Motor
- 500-lb. Stuffer
- 400-lb. Stuffer
- 200-lb. Stuffer
- 60-B Grinder for motor

Thoroughly overhauled and guaranteed like new. Box W-3, THE NATIONAL PROVISIONER, 407 So. Dearborn St., Chicago, Ill.

## Equipment Wanted

### Packing Equipment Wanted

Wanted for user 2-50 and 100 lb. Silent Cutters 2-50 and 100 lb. Stuffers: 2-100 and 200 lb. Mixers: 3-Grinders; Filter Press. Lard Cooling Roll. No dealers. W-718, THE NATIONAL PROVISIONER, 300 Madison Ave., New York City.

## SAUSAGE PROBLEMS? Here's Your Answer!

### "Sausage and Meat Specialties"

The first book of its kind on these important subjects. Sausage manufacturers and sausagemakers are applying it to their daily operations, and prominent educators in agricultural colleges have adopted it as a text book. Modern authentic sausage practices, tested and proven sausage formulas, recommendations for manufacturing and operating procedure and plant layout suggestions highlight the subjects covered in this outstanding volume. Order your copy today . . . price \$5.00, postpaid.

**THE NATIONAL PROVISIONER**  
407 SOUTH DEARBORN STREET • CHICAGO, ILLINOIS



**BEEF • PORK • VEAL • LAMB  
CANNED FOODS  
HAMS • BACON • LARD • SAUSAGE**

*We specialize in carlot beef sales*

**J O H N M O R R E L L & C O .**

*General Offices: OTTUMWA, IOWA*

*Packing Plants: OTTUMWA, IOWA; SIOUX FALLS, SOUTH DAKOTA; TOPEKA, KANSAS*



*Philadelphia Scrapple a Specialty*

**John J. Felin & Co., Inc.**

4142-60 Germantown Ave., Philadelphia, Pa.

New York Branch: 402-10 West 14th St.

**HAMS • BACON • LARD • DELICATESSEN**



**Liberty  
Bell Brand**

Hams—Bacon—Sausages—Lard—Scrapple  
F. G. VOGT & SONS, INC.—PHILADELPHIA, PA.



**PORK PRODUCTS — SINCE 1876**  
The H. H. MEYER PACKING CO.  
Cincinnati, Ohio

**THE E. KAHN'S SONS CO.**  
CINCINNATI, O.

**"AMERICAN BEAUTY"  
HAMS AND BACON**

Straight and Mixed Cars of Beef,  
Veal, Lamb and Provisions

*Represented by*

NEW YORK PHILADELPHIA WASHINGTON BOSTON  
H. L. Woodruff Earl McAdams Clayton P. Lee P. G. Gray Co.  
437 W. 13th St. 38 N. Delaware Av. 1108 F. St. S. W. 148 State St.

**KINGAN'S RELIABLE**

**HAMS • BACON • LARD • SAUSAGE  
CANNED MEATS • OLEOMARGARINE  
CHEESE • BUTTER • EGGS • POULTRY**

*A full line of Fresh Pork • Beef • Veal  
Mutton and Cured Pork Cuts*

*Hides • Digester Tankage*

**KINGAN & CO.**

**PORK AND BEEF PACKERS**

Main Plant, Indianapolis

Established 1845

**PATENT CASING COMPANY**

*Manufacturers of*

**PATENT SEWED CASINGS**

*MADE UNDER SOLID METHODS*

617-23 West 24th Place

Chicago, Illinois

**GET THE BEST**



**CLEAN  
TASTY  
WHOLESALE**

**ALWAYS ASK FOR THE  
"ORIGINAL"  
"SELTZER BRAND"  
LEBANON BOLOGNA**

*MFR'D BY  
PALMYRA BOLOGNA CO., INC.  
PALMYRA, PENNA.*

**Rath's**

*from the Land O' Corn*

**BLACK HAWK HAMS AND BACON**

**PORK - BEEF - VEAL - LAMB**

*Straight and Mixed Cars of Packing House Products*

**THE RATH PACKING CO.**

**WATERLOO, IOWA**



Main Office and Packing Plant  
Austin, Minnesota

## BICZYJA

(Pronounced BE-CHI-YA)

### — AND — PRONOUNCED

The finest Polish-Style Ham on the market today by hundreds of satisfied Tobin customers!

**THE TOBIN PACKING CO., INC.**

FORT DODGE, IOWA



## THE CUDAHY PACKING CO.

PRODUCERS, IMPORTERS AND EXPORTERS OF

## Sausage Casings

221 NORTH LA SALLE STREET

CHICAGO, U. S. A.

## Wilmington Provision Company

### TOWER BRAND MEATS

*Slaughterers of Cattle, Hogs,  
Lambs and Calves*

U. S. GOVERNMENT INSPECTION

WILMINGTON

DELAWARE

## THE CASING HOUSE BERT. LEVI & CO., INC.

ESTABLISHED 1882

NEW YORK  
BUENOS AIRES

CHICAGO  
AUSTRALIA

LONDON  
WELLINGTON

# ADVERTISERS in this issue of the National Provisioner

Allbright-Nell Co., The....	Third Cover
American Can Co.....	3
Armour and Company.....	6
Bemis Bros. Bag Co.....	12
Callahan, A. P. & Co.....	27
Cincinnati Butchers' Supply Co.....	22
Cleveland Cotton Products Co.....	22
Corn Products Sales Co.....	5
Cudahy Packing Co.....	44
Fearn Laboratories .....	22
Felin, John J. & Co., Inc.....	43
Griffith Laboratories, The.....	16
Ham Boiler Corp.....	20
Hormel, Geo. A., & Co.....	44
Hunter Packing Co.....	45
Hygrade Food Products Corporation ..	45
Institute of American Meat Packers.....	24, 25
Jackle, Frank R.....	38
Kahn's E., Sons Co.....	43
Kennett-Murray & Co.....	38
Kingan & Co.....	43
Legg, A. C., Packing Co., Inc.....	35
Levi, Berth. & Co., Inc.....	44
Mayer, H. J., & Sons Co.....	35
McMurray, L. H.....	38
Meyer, H. H. Packing Co.....	43
Mitts & Merrill.....	31
Morrell, John, & Co.....	43

*While every precaution is taken to insure accuracy, the publishers assume no responsibility for statements made by advertisers or authors.*

RS  
the National Provisioner



ver	
3	
6	
12	
22	
22	
5	
44	
22	
43	
16	
20	
44	
45	
45	
25	
.38	
.43	
.38	
.43	
.35	
.44	
.35	
.38	
.43	
.31	
.43	
Palmyra Bologna Co., Inc.....	43
Patent Casing Company.....	43
Pink Supply Co.....	31

Rath Packing Company.....	43
Robbins & Myers, Inc.....	20

Smith's Sons Co., John E.. Second Cover	
Spencer Kellogg and Sons, Inc.....	31
Stange, Wm. J., Co.....	31
Stedman's Foundry & Machine Wks...31	
Steelcote Mfg. Co., The.....First Cover	
Superior Packing Co.....	45
Swift & Co.....Fourth Cover	
Sylvania Industrial Corp.....	14

Tobin Packing Co.....	44
-----------------------	----

U. S. Slicing Machine Co.....	31
United Cork Cos.....	16

Vogt, F. G., Sons, Inc.....	43
-----------------------------	----

Wilmington Provision Co.....	44
------------------------------	----

The firms listed here are in partnership with you. The products and equipment they manufacture and the services they render are designed to help you do your work more efficiently, more economically and to help you make better products which you can merchandise more profitably. Their advertisements offer opportunities to you which you should not overlook.

accuracy, no guarantee against the possibility of a change or omission in this index

### HONEY BRAND

Hams - Bacon  
Dried Beef

### HYGRADE'S

Original West  
Virginia Cured Ham  
Ready to Serve

### HYGRADE'S

Frankfurters in  
Natural Casings

### HYGRADE'S

Beef - Veal  
Lamb - Pork



**CONSULT US BEFORE  
YOU BUY OR  
SELL**

**Domestic and Foreign  
Connections  
Invited!**

## HYGRADE FOOD PRODUCTS CORP.

30 Church Street, New York, N. Y.

## Superior Packing Co.

Price      Quality      Service



Chicago

St. Paul

**DRESSED BEEF  
BONELESS BEEF and VEAL**

*Carlots*

*Barrel Lots*

## HUNTER PACKING COMPANY

East St. Louis, Illinois

**STRAIGHT AND MIXED CARS OF BEEF AND PROVISIONS**

NEW YORK  
OFFICE

106 Gansevoort St.



**Representatives:**  
William G. Joyce  
Boston, Mass.

F. C. Rogers Co.  
Philadelphia, Pa.

**READY NOW IN PERMANENT FORM!**

*The First Thirty-Seven Lessons in*  
**THE NATIONAL PROVISIONER'S**

# School of Refrigeration

Almost simultaneously with the appearance of the first article under the general head of "The National Provisioner's School of Refrigeration" in July, 1938, letters of commendation were received from packers, superintendents, master mechanics and engineers in all sections of the country. The course had hardly gotten under way before requests for reprints began to come in. These have continued in increasing numbers.

"Volume 1, Meat Plant Refrigeration and Air Conditioning" is THE NATIONAL PROVISIONER'S answer to this demand. The author of the articles and the man who revised the first thirty-seven lessons in the course is a meat plant engineer—an expert in packinghouse refrigerating problems.

The articles in this new volume appear in lesson form and are designed to enable those interested in meat plant operation, as well as refrigeration, to acquire a practical working knowledge of this basic subject as well as fundamental information essential to the worker who has ambitions beyond his present job.

This first edition is limited. Fill out the coupon and mail in your  
order today. Price postpaid. \$1.50.

# **MEAT PLANT REFRIGERATION AND AIR CONDITIONING**

Volume 1

Gives you the first thirty-seven lessons in "The National Provisioner's School of Refrigeration," revised to date by the author, in permanent book form.

The volume is indexed in such a manner as to permit ready reference to the many ramifications of any subject covered in the articles. As an example, this is the way the index treats the subject of "Heat."

	Page No.
<b>HEAT.....</b>	<b>3</b>
conduction of.....	7
conversion of.....	7
cubic foot of.....	7
generated in cooler.....	6
how it is measured.....	4
mechanical equivalent of.....	8
radiation of.....	7
removal during chilling.....	8
transfer of.....	7

The contents of "Meat Plant Refrigeration and Air Conditioning" are the first ever prepared on refrigeration from the packinghouse angle.

**THE NATIONAL PROVISIONER, 407 SO. DEARBORN ST., CHICAGO, ILL.**

Please mail as soon as off the press — copies of "Meat Plant Refrigeration and Air Conditioning" at \$1.50 per copy to

Name: \_\_\_\_\_ Firm: \_\_\_\_\_

**Address** \_\_\_\_\_ **City** \_\_\_\_\_ **State** \_\_\_\_\_

# "QA" HYDRAULIC CRACKLING PRESS



**PUTS THE HIGHEST QUALITY  
MATERIALS AND WORKMANSHIP  
INTO EVERY MACHINE**

● Ever mindful of the fact that a single breakdown will increase the cost of a cheap machine, The Allbright-Nell Co. adheres strictly to the policy of putting the highest quality of materials and workmanship into all ANCO Machinery. Especially is this true in the ANCO "QA" Hydraulic Crackling Press, which must be scientifically designed and heavily constructed. Particular attention has been paid to durability, lubrication and ease of replacing worn parts to the extent that ANCO Crackling Presses are established as Standard Equipment in hundreds of Packing and Rendering Plants.

WRITE FOR NEW  
RENDERING CATALOG No. 50



**4**

**STANDARD SIZES**

**80 TONS**

**150 TONS**

**300 TONS**

**600 TONS**

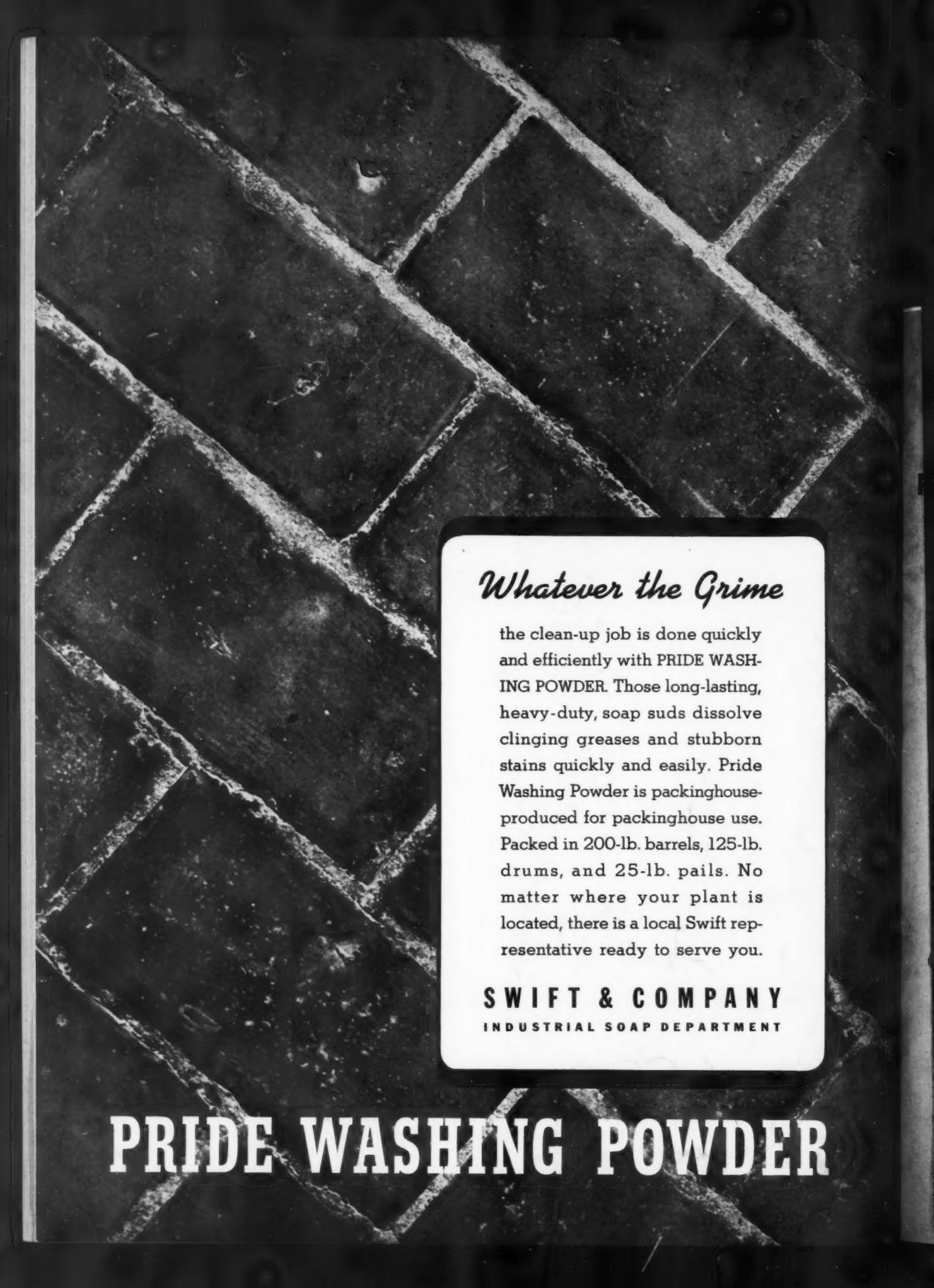
---

**THE ALLBRIGHT-NELL CO.**

5323 S. WESTERN BLVD., CHICAGO, ILLINOIS

117 LIBERTY STREET, NEW YORK, N. Y.

---



## *Whatever the Grime*

the clean-up job is done quickly and efficiently with PRIDE WASHING POWDER. Those long-lasting, heavy-duty, soap suds dissolve clinging greases and stubborn stains quickly and easily. Pride Washing Powder is packinghouse-produced for packinghouse use. Packed in 200-lb. barrels, 125-lb. drums, and 25-lb. pails. No matter where your plant is located, there is a local Swift representative ready to serve you.

**SWIFT & COMPANY**  
INDUSTRIAL SOAP DEPARTMENT

# PRIDE WASHING POWDER

